

EXHIBIT N

Exhibit 885-7

Invalidity Claim Chart for U.S. Patent No. 10,848,885 (“the ’885 patent”)

Bose Lifestyle 50 System (“Bose Lifestyle”): Bose Lifestyle was publicly available at least as of October 17, 2001.

Bose Lifestyle anticipates at least claims 1, 3, 7, 8, 10, 14 of the ’885 patent under 35 U.S.C. § 102, and renders obvious claims 1, 3, 7, 8, 10, 14 of the ’885 patent under 35 U.S.C. § 103, alone based on the state of the art and/or in combination with one or more of the secondary references noted in the below chart, or one or more of the references noted in Riders A-H, L. To the extent it is argued this reference does not disclose any element, that element would be obvious based on the state of the art and/or in combination with one or more of the references noted in Riders A-H, L.

Bose Lifestyle was described in a printed publication, or in public use, on sale, sold, known in this country, or otherwise available to the public before the priority date of the ’885 patent and before September 2005. Features of the of the Bose Lifestyle would have been apparent to a person of ordinary skill in the art, rendering the reference and publications prior art under § 102(a), (b), and (g) prior art.

At least the following documents describe the functionality of the Bose Lifestyle:

1. [1] Bose Lifestyle 50 System, Owner’s Guide, October 17, 2001
(https://assets.bose.com/content/dam/Bose_DAM/Web/consumer_electronics/global/products/speakers/ls50_system/pdf/owng_en_ls50.pdf; http://web.archive.org/web/20030915070144/http://mirror.bose.com/owners_support/owners_guides/og_ls50.pdf; http://web.archive.org/web/20030201090239/http://www.bose.com/home_audio/ht_systems/ls35/)
2. [2] The Bose Lifestyle Amplifier, Owner’s Guide, January 4, 2002
(https://assets.bose.com/content/dam/Bose_DAM/Web/consumer_electronics/global/products/speakers/ls12_series1/pdf/owng_en_sal.pdf)
3. [3] <http://www.audioreview.com/product/other/mini-systems/bose/lifestyle-50.html>

Google expects to supplement this chart upon production of source code and other documents produced in discovery in this litigation relating to the Bose Lifestyle.

These documents themselves are also each individually prior art under at least one of § 102(a), (b), (g) and § 103 based on their dates of publication and public availability.

To avoid duplication and cumulative excerpts, exemplary quotations and citations are provided. The citations to portions of any reference in this chart are exemplary only. Google reserves the right to use the entirety of any reference cited in this chart to show that the asserted claims are anticipated and/or obvious, or to show the state of the art at the relevant time. References to figures should be understood to also refer to any accompanying text. Additional support can be found elsewhere in the prior art reference, and Google expressly reserves the right to rely on such other support and passages at a later time. The use of claim terms in the below chart is based on Sonos' construction of claim terms in its infringement contentions as understood by Google, as well as the plain and ordinary meaning of the claim terms. This chart should not be construed as consenting to or agreeing with Sonos' construction of claim terms. Because discovery is ongoing, Google reserves all rights to amend its invalidity contentions based on new information produced in discovery.

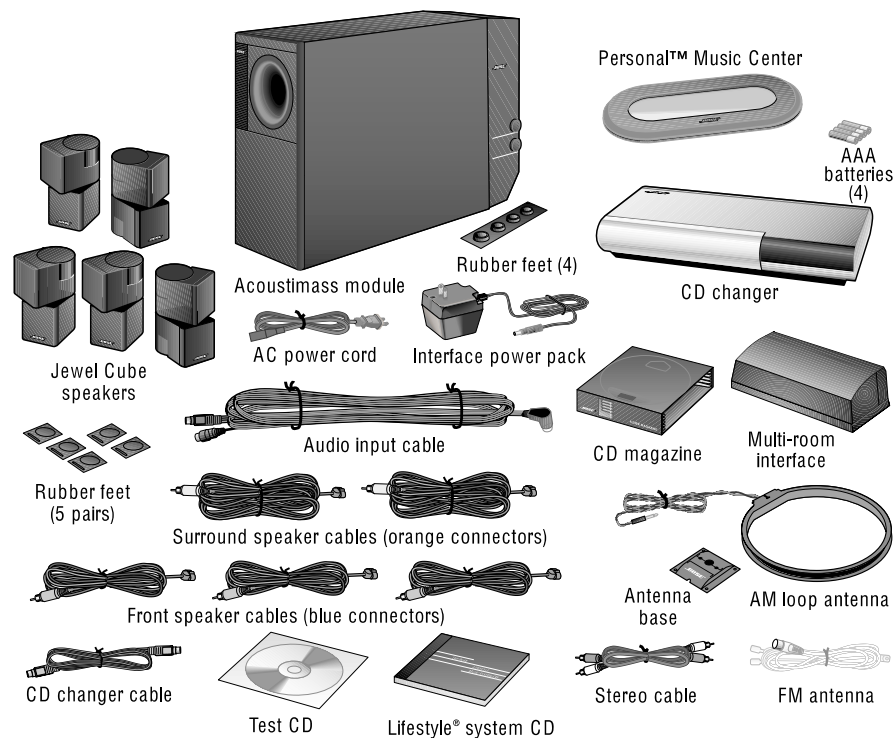
Google expressly reserves the right to supplement its invalidity contentions, including this chart, to demonstrate that the prior art invalidates the claims of the '885 patent

Claim 1 Portion	Claim 1 Text	Bose Lifestyle
[1Pre]	<i>A first zone player comprising:</i>	<p>Bose Lifestyle includes a first zone player. For example:</p> <p>[1] at 4:</p> <p>Thank you for purchasing the Bose® Lifestyle® 50 system. Years of research lie behind this complete audio home entertainment system – the most advanced home theater system from Bose. Technological innovations that make the Lifestyle® 50 system unique include the Bose Personal™ music center, which places all system operations in the palm of your hand, and tiny Jewel Cube® speakers.</p> <p>The interactive Personal music center is a clear departure from convention, communicating with the system through a two-way radio data link. The result for you is full control of this entertainment system as you move about your home.</p> <p>The other elements of the Lifestyle® 50 system are designed to be hidden from view:</p> <ul style="list-style-type: none"> • The elegant Lifestyle® CD changer, designed to give you flexibility in where it is placed • The hideaway powered Acoustimass® module that delivers the rich, full, lifelike bass • The Bose multi-room interface, with four independent audio outputs that allow you to enjoy Bose sound throughout your home. <p>[1] at 5:</p>

Figure 1

What comes with your Lifestyle® 50 system:

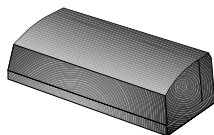
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle® system CD
- Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

Select a location for the multi-room interface. It may be placed out of sight if you like.

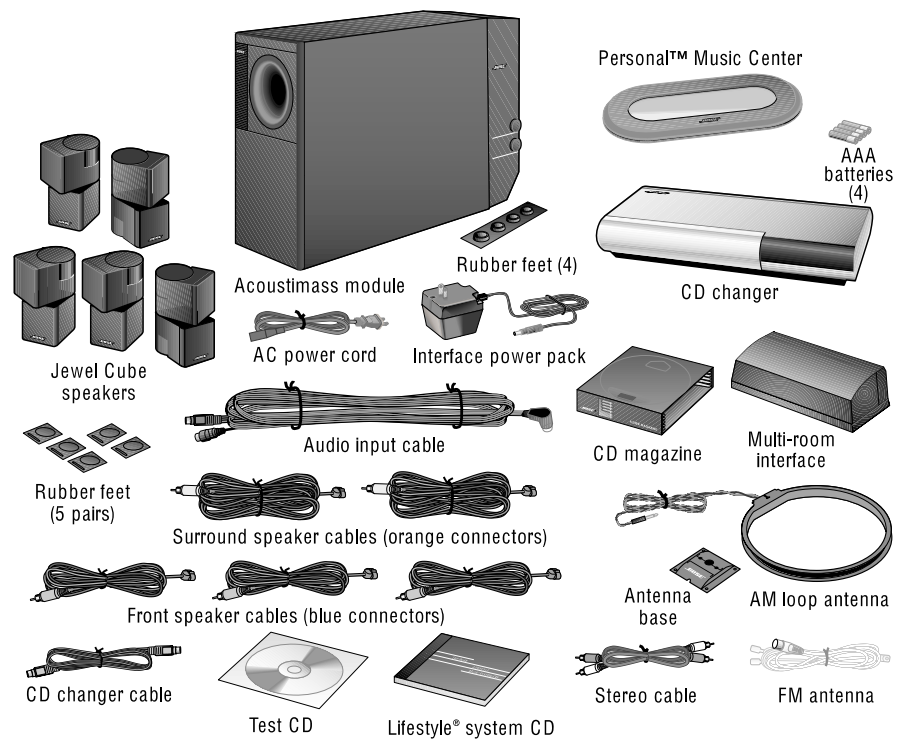
1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1a]	<i>a network interface that is configured to communicatively couple the first zone player to at least one data network;</i>	<p>Bose Lifestyle includes a network interface that is configured to communicatively couple the first zone player to at least one data network. For example:</p> <p>[1] at 4:</p> <p><i>Automatic sound level monitoring and control</i></p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

What comes with your Lifestyle® 50 system:

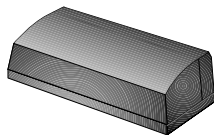
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
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[1] at 8:

Figure 5

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Select a location for the multi-room interface. It may be placed out of sight if you like.

1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1] at 9:

Connecting the Jewel Cube® speakers to the Acoustimass® module

1. Match each cable to the corresponding speaker location.
 - Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end.
 - Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end.
2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack.
3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8).
 - Plug the blue connectors into the matching left front, center, and right front jacks.
 - Plug the orange connectors into the matching left surround and right surround jacks.

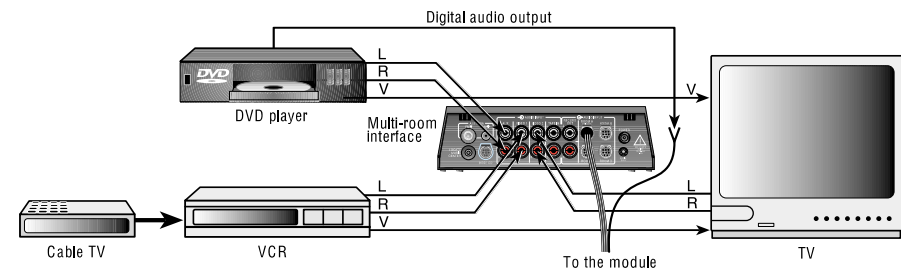
To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter (“barrel” connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.

[1] at 10:

		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p>🎵 Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p>🎵 Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12

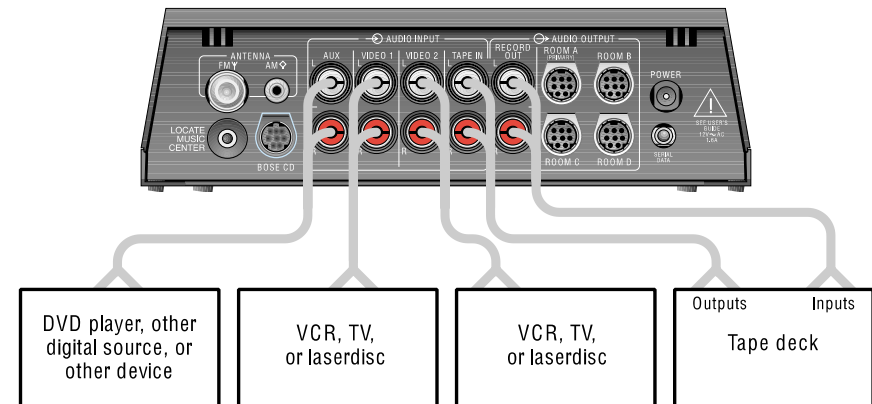
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14

Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

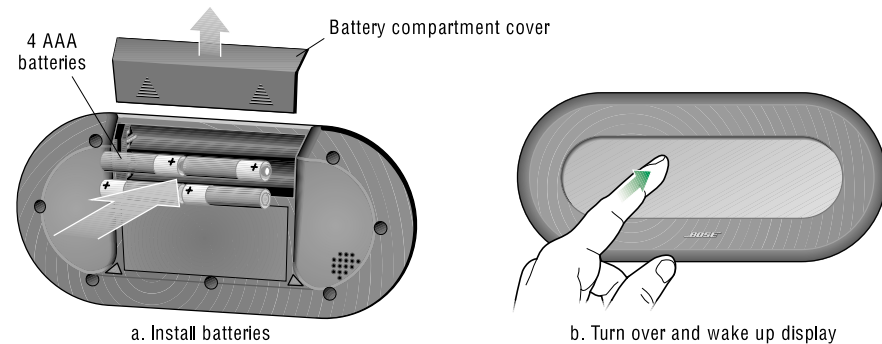
🎵 **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



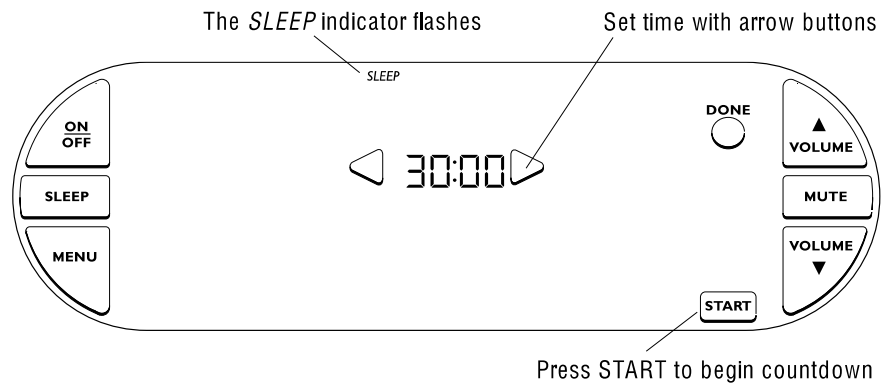
🎵 **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none">• To learn more about the display, see “Using the Personal music center display” on pages 20-21.• To operate the AM/FM radio, see “Listening to the radio” on pages 26-28.• To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD.• To control external components, see “Using the system with external components” on page 35.• To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

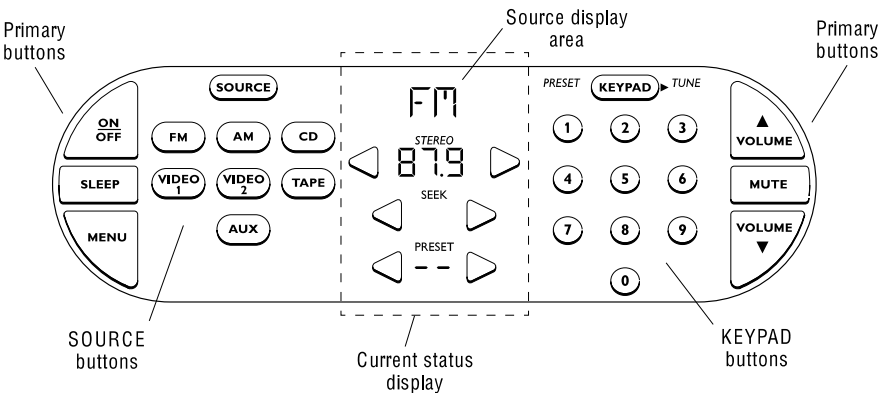
Using the Personal™ music center display

The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21
The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



[1] at 22:

Listening to the system

Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.

In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.

You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.

[1] at 22:

Adjusting center and surround levels

The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.

- The CENTER level can be adjusted to soften or emphasize center speaker image.
- The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear.

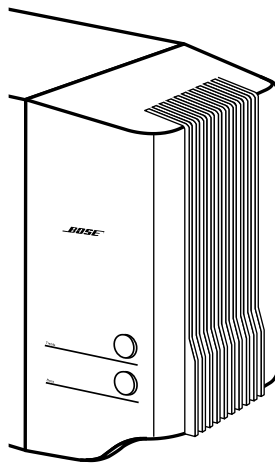
The system remembers the center and surround level settings for the room in which they were adjusted.

[1] at 36:

Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.

CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

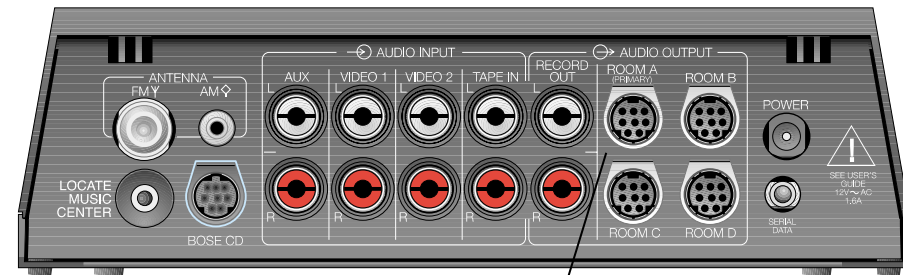
Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.

Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



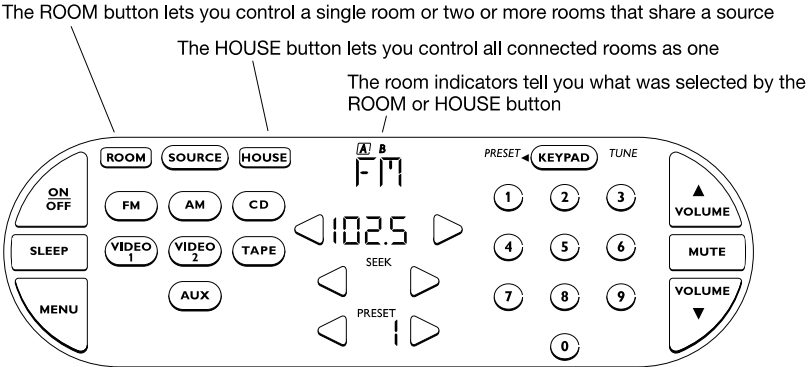
Room A, B, C, and D jacks

[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48
Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the HOUSE button</p> <p>Using the HOUSE button, you can link all rooms together and control them as one. When you press the HOUSE button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, VOLUME, MUTE, or SLEEP) affects every room. When you are done listening you can press OFF to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing HOUSE, pressing HOUSE again cancels HOUSE mode.</i></p> <p>Press the HOUSE button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td>HOUSE then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td>HOUSE then VOLUME ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td>HOUSE then MUTE</td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.</td></tr><tr><td>HOUSE then SLEEP</td><td>Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.</td></tr><tr><td>HOUSE then OFF</td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the ROOM button to select each room and setting SLEEP.</i></p> <p><i>When two or more rooms are linked, adjusting the SLEEP time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	HOUSE then a source	Play the selected source in all connected rooms.	HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.	HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.	HOUSE then OFF	Turn off the entire system.
Press ...	To do this ...													
HOUSE then a source	Play the selected source in all connected rooms.													
HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.													
HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.													
HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.													
HOUSE then OFF	Turn off the entire system.													

		<p>[1] at 43:</p> <p><i>Using more than one Personal™ music center</i></p> <p>If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.</p> <p>To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates <i>NO RESPONSE</i>.</p> <p>To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider I. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[1b]	<i>one or more processors;</i>	<p>Bose Lifestyle includes one or more processors. For example:</p> <p>[1] at 4:</p> <p>Thank you for purchasing the Bose® Lifestyle® 50 system. Years of research lie behind this complete audio home entertainment system – the most advanced home theater system from Bose. Technological innovations that make the Lifestyle® 50 system unique include the Bose Personal™ music center, which places all system operations in the palm of your hand, and tiny Jewel Cube® speakers.</p> <p>The interactive Personal music center is a clear departure from convention, communicating with the system through a two-way radio data link. The result for you is full control of this entertainment system as you move about your home.</p>

The other elements of the Lifestyle[®] 50 system are designed to be hidden from view:

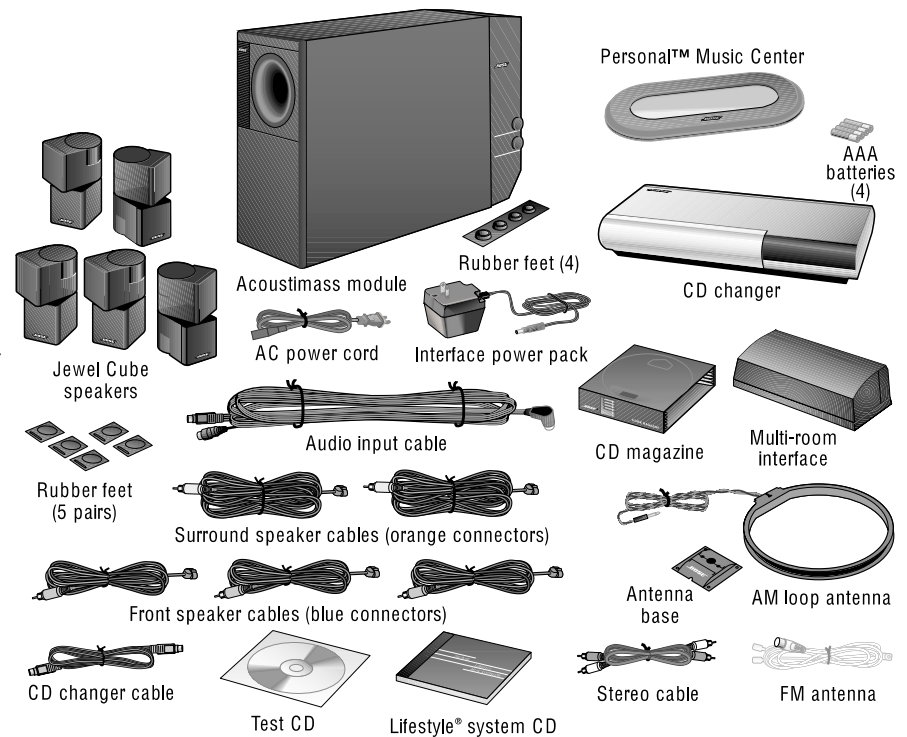
- The elegant Lifestyle[®] CD changer, designed to give you flexibility in where it is placed
- The hideaway powered Acoustimass[®] module that delivers the rich, full, lifelike bass
- The Bose multi-room interface, with four independent audio outputs that allow you to enjoy Bose sound throughout your home.

[1] at 5:

Figure 1

What comes with your Lifestyle[®] 50 system:

- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube[®] speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle[®] system CD
- Test CD



[1] at 8:

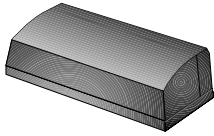
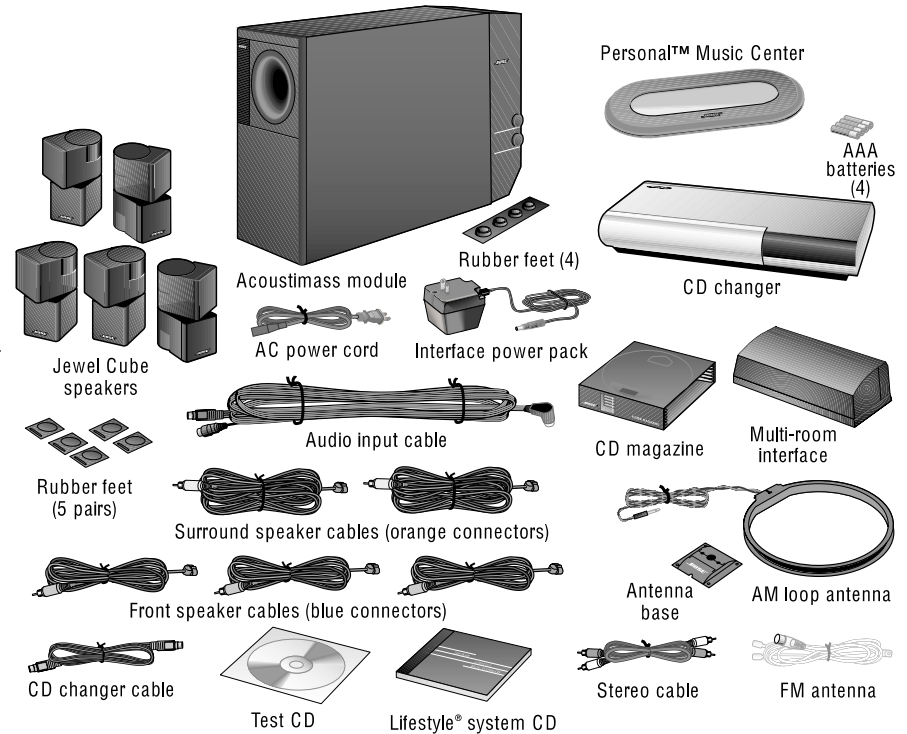
		<p>Figure 5</p> <p><i>The multi-room interface</i></p>  <p>Multi-room interface</p> <p>Select a location for the multi-room interface. It may be placed out of sight if you like.</p> <ol style="list-style-type: none"> 1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable). 2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.
[1c]	<p><i>a non-transitory computer-readable medium; and program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:</i></p>	<p>Bose Lifestyle includes a non-transitory computer-readable medium; and program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising. For example:</p> <p>[1] at 4:</p> <p>Automatic sound level monitoring and control</p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

What comes with your Lifestyle® 50 system:

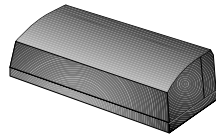
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle® system CD
- Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

Select a location for the multi-room interface. It may be placed out of sight if you like.

1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1] at 9:

Connecting the Jewel Cube® speakers to the Acoustimass® module

1. Match each cable to the corresponding speaker location.
 - Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end.
 - Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end.
2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack.
3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8).
 - Plug the blue connectors into the matching left front, center, and right front jacks.
 - Plug the orange connectors into the matching left surround and right surround jacks.

To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter (“barrel” connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.

[1] at 10:



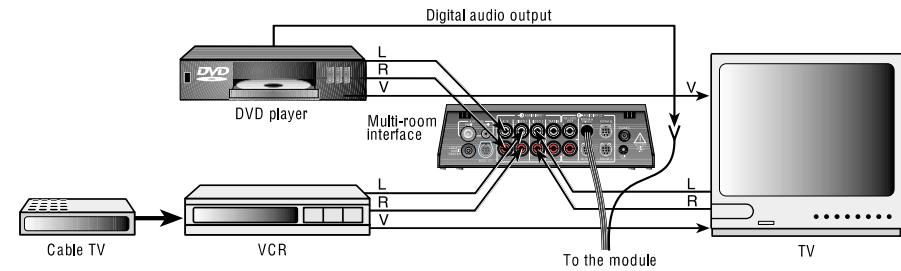
		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p> Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p> Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12

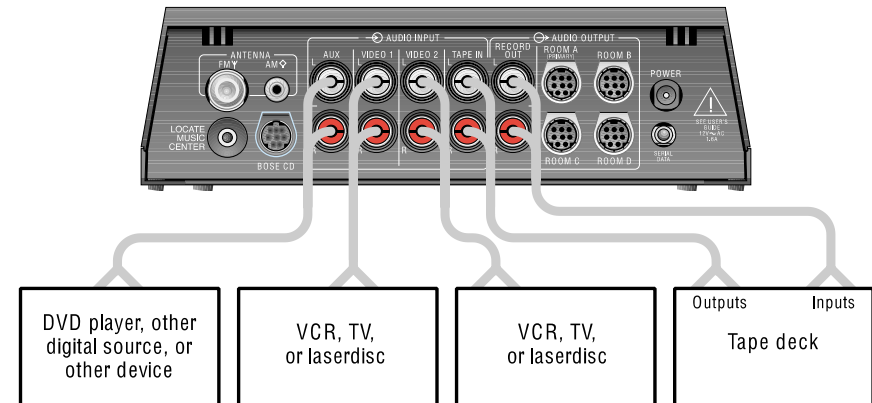
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14

Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

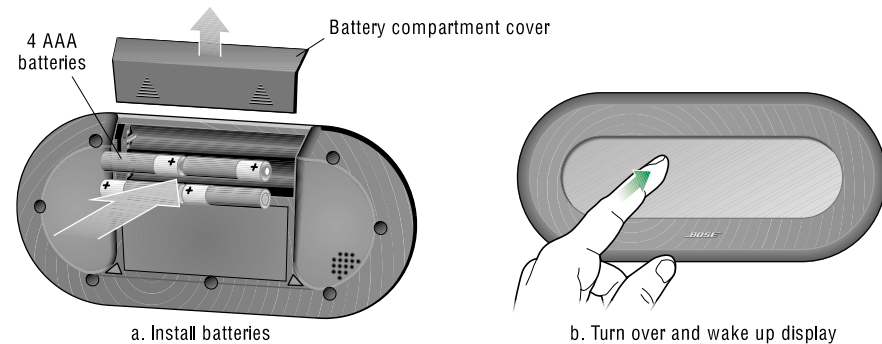
🎵 **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



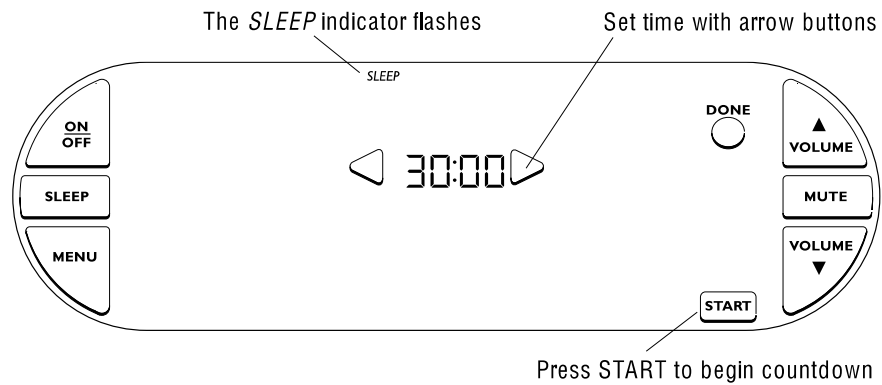
🎵 **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none"> • To learn more about the display, see “Using the Personal music center display” on pages 20-21. • To operate the AM/FM radio, see “Listening to the radio” on pages 26-28. • To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD. • To control external components, see “Using the system with external components” on page 35. • To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

Using the Personal™ music center display

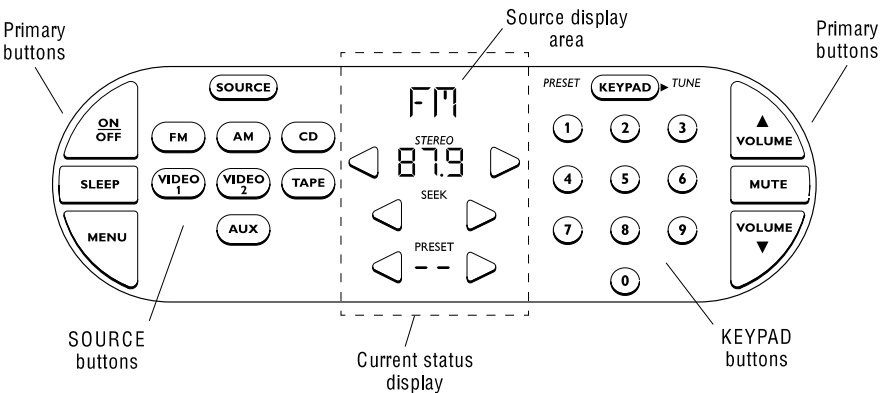
The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21

The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



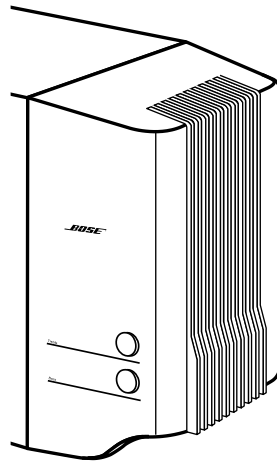
[1] at 22:

		<p><i>Listening to the system</i></p> <p>Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.</p> <p>In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.</p> <p>You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.</p> <p>[1] at 22:</p> <p><i>Adjusting center and surround levels</i></p> <p>The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.</p> <ul style="list-style-type: none"> • The CENTER level can be adjusted to soften or emphasize center speaker image. • The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear. <p>The system remembers the center and surround level settings for the room in which they were adjusted.</p> <p>[1] at 36:</p>
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Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.

CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

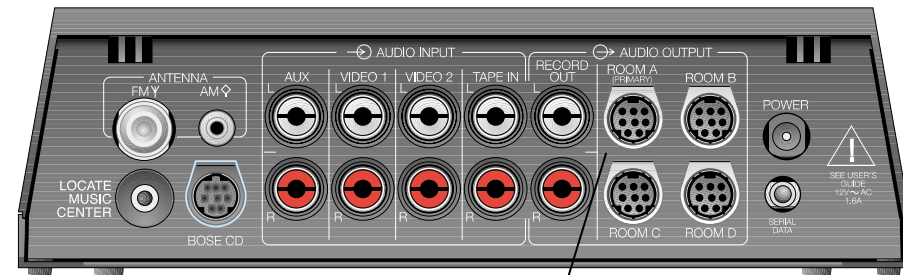
Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.

Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



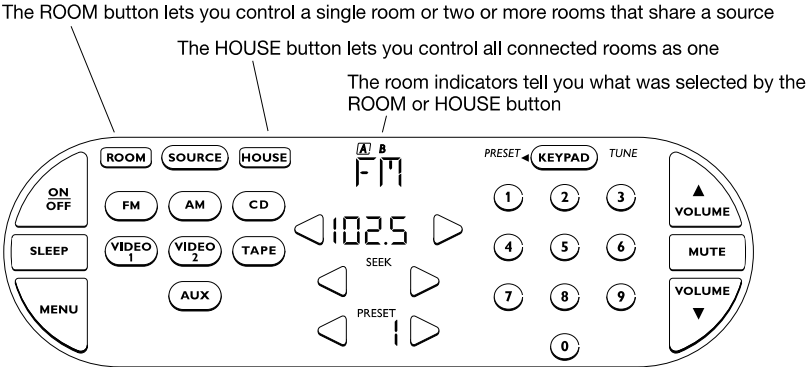
Room A, B, C, and D jacks

[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48
Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the <i>HOUSE</i> button</p> <p>Using the <i>HOUSE</i> button, you can link all rooms together and control them as one. When you press the <i>HOUSE</i> button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, <i>VOLUME</i>, <i>MUTE</i>, or <i>SLEEP</i>) affects every room. When you are done listening you can press <i>OFF</i> to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing <i>HOUSE</i>, pressing <i>HOUSE</i> again cancels <i>HOUSE</i> mode.</i></p> <p>Press the <i>HOUSE</i> button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td><i>HOUSE</i> then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td><i>HOUSE</i> then <i>VOLUME</i> ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td><i>HOUSE</i> then <i>MUTE</i></td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.</td></tr><tr><td><i>HOUSE</i> then <i>SLEEP</i></td><td>Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i>, <i>SLEEP</i>, <i>CLEAR</i>, and then <i>DONE</i>.</td></tr><tr><td><i>HOUSE</i> then <i>OFF</i></td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the <i>ROOM</i> button to select each room and setting <i>SLEEP</i>.</i></p> <p><i>When two or more rooms are linked, adjusting the <i>SLEEP</i> time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	<i>HOUSE</i> then a source	Play the selected source in all connected rooms.	<i>HOUSE</i> then <i>VOLUME</i> ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	<i>HOUSE</i> then <i>MUTE</i>	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.	<i>HOUSE</i> then <i>SLEEP</i>	Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i> , <i>SLEEP</i> , <i>CLEAR</i> , and then <i>DONE</i> .	<i>HOUSE</i> then <i>OFF</i>	Turn off the entire system.
Press ...	To do this ...													
<i>HOUSE</i> then a source	Play the selected source in all connected rooms.													
<i>HOUSE</i> then <i>VOLUME</i> ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.													
<i>HOUSE</i> then <i>MUTE</i>	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.													
<i>HOUSE</i> then <i>SLEEP</i>	Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i> , <i>SLEEP</i> , <i>CLEAR</i> , and then <i>DONE</i> .													
<i>HOUSE</i> then <i>OFF</i>	Turn off the entire system.													

[1] at 43:

Using more than one Personal™ music center

If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.

To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates *NO RESPONSE*.

[1] at 23:

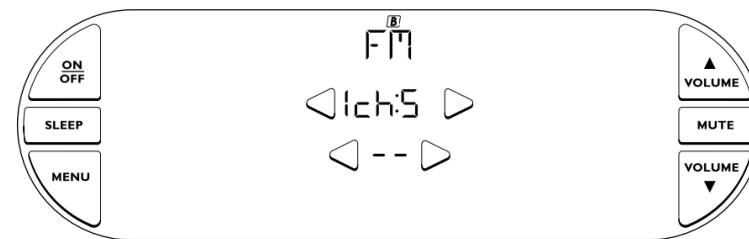
Using simulated surround for mono movie material

Bose® Videostage® decoding can process a one-channel program into five-speaker sound, directing the signals so that dialogue remains locked on-screen, while music and ambient effects fill the room. You experience a surround sensation, providing extra enjoyment when you watch older, pre-stereo movies. This feature can be used for mono TV, FM, and AM programs. It is automatically turned on when a Dolby Digital bitstream indicates that it contains a mono program.

For other mono program sources, you can engage or disengage this feature using the Personal™ music center. Press MENU and hold it until drc or 1ch:5 appears on the display. If drc is displayed, press either of the top ◀ or ▶ arrow buttons to select 1ch:5 (Figure 25). Then use the lower ◀ or ▶ arrow buttons to select between On or -- (Off). Initially, this feature is On for AM and off (--) for all other sources. If you change the setting for any source, the system is reset to these settings when you turn off a room.

Figure 25

Selecting five-speaker sound for a mono source

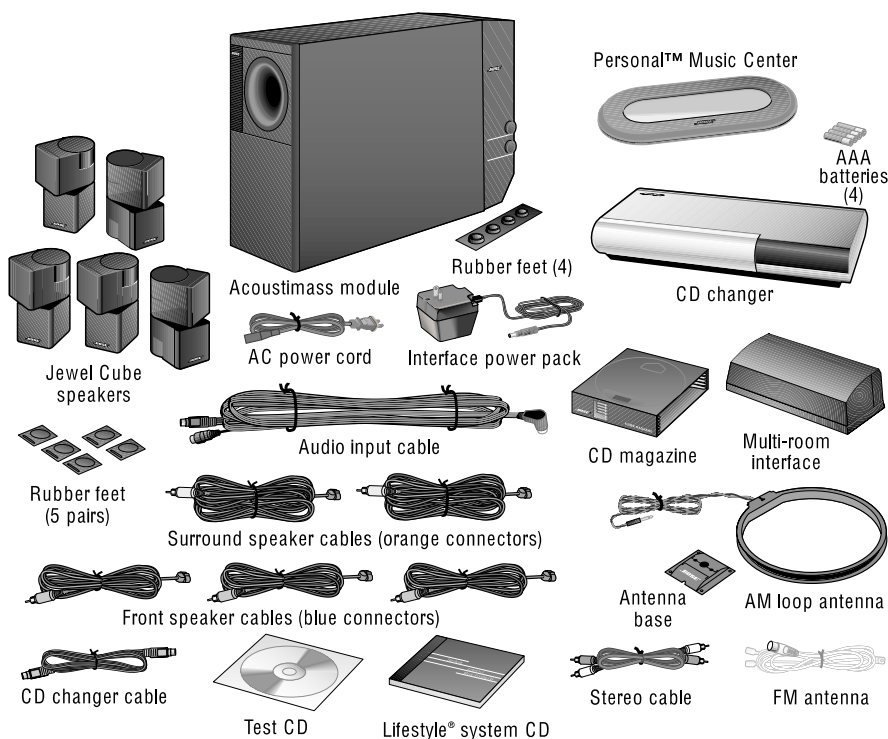


[1d]	<p><i>while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:</i></p>	<p>Bose Lifestyle includes while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players. For example:</p> <p>[1] at 4:</p> <p><i>Automatic sound level monitoring and control</i></p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

What comes with your Lifestyle® 50 system:

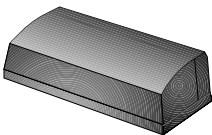
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle® system CD
- Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

Select a location for the multi-room interface. It may be placed out of sight if you like.

1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1] at 9:

Connecting the Jewel Cube® speakers to the Acoustimass® module

1. Match each cable to the corresponding speaker location.
 - Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end.
 - Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end.
2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack.
3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8).
 - Plug the blue connectors into the matching left front, center, and right front jacks.
 - Plug the orange connectors into the matching left surround and right surround jacks.

To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter (“barrel” connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.

[1] at 10:



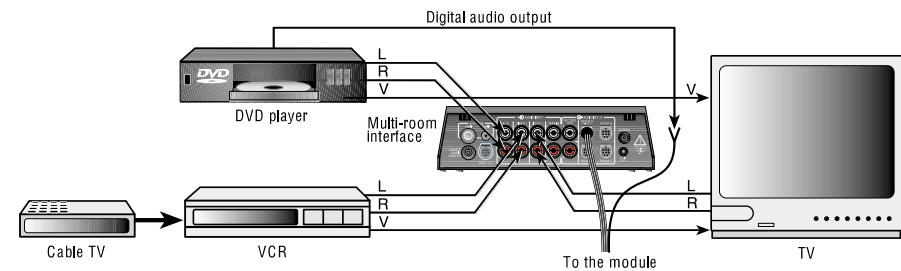
		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p> Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p> Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12

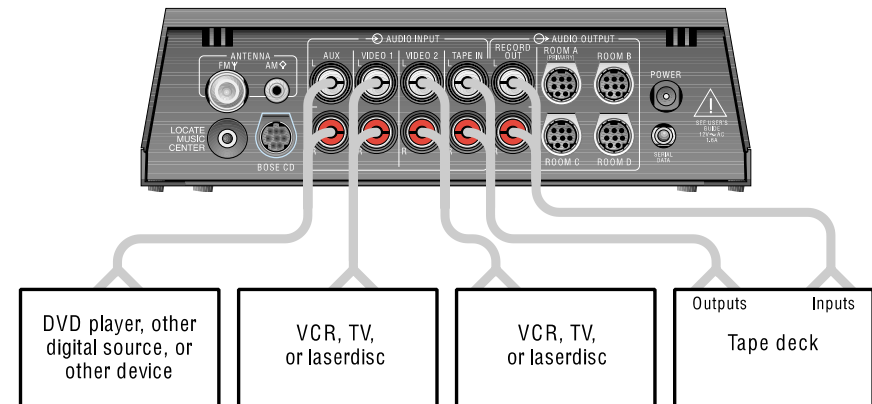
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14

Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

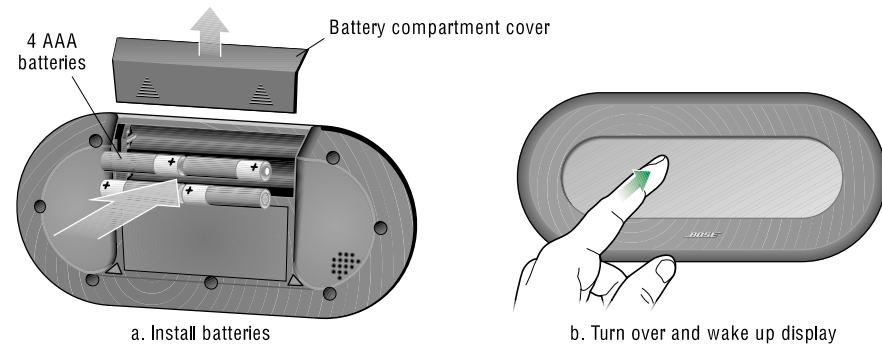
🎵 **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



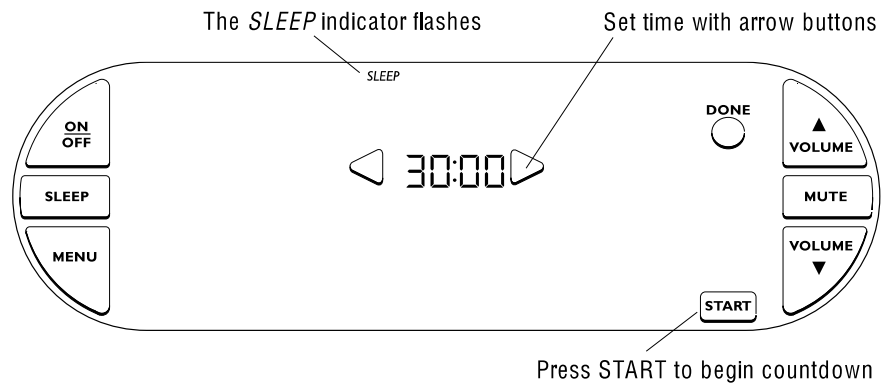
🎵 **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none">• To learn more about the display, see “Using the Personal music center display” on pages 20-21.• To operate the AM/FM radio, see “Listening to the radio” on pages 26-28.• To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD.• To control external components, see “Using the system with external components” on page 35.• To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

Using the Personal™ music center display

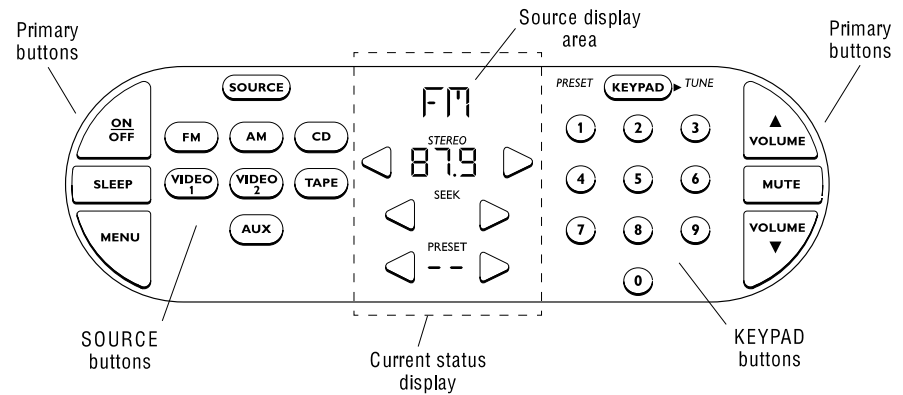
The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21

The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



[1] at 22:

Listening to the system

Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.

In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.

You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.

[1] at 22:

Adjusting center and surround levels

The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.

- The CENTER level can be adjusted to soften or emphasize center speaker image.
- The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear.

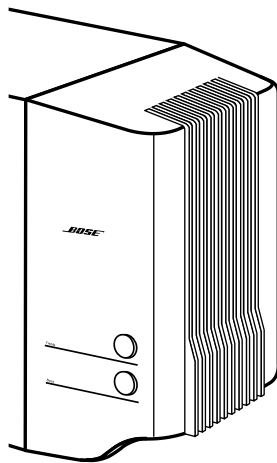
The system remembers the center and surround level settings for the room in which they were adjusted.

[1] at 36:

Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.

CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

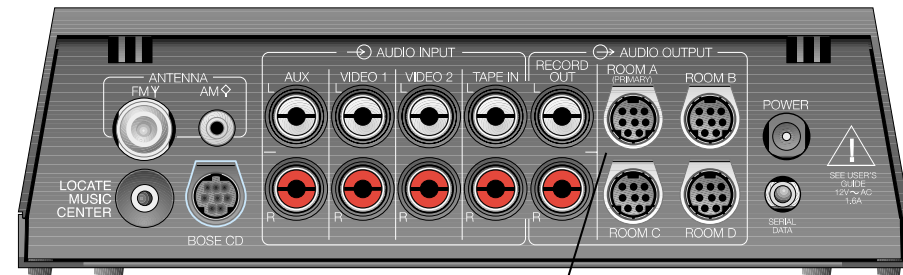
Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.

Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



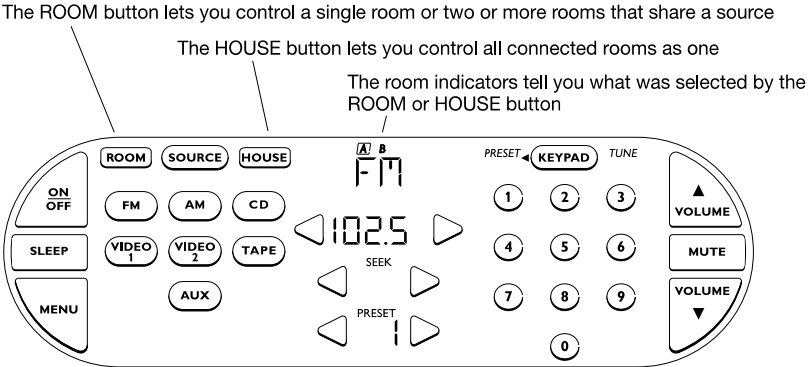
Room A, B, C, and D jacks

[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48
Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the <i>HOUSE</i> button</p> <p>Using the <i>HOUSE</i> button, you can link all rooms together and control them as one. When you press the <i>HOUSE</i> button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, <i>VOLUME</i>, <i>MUTE</i>, or <i>SLEEP</i>) affects every room. When you are done listening you can press <i>OFF</i> to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing <i>HOUSE</i>, pressing <i>HOUSE</i> again cancels <i>HOUSE</i> mode.</i></p> <p>Press the <i>HOUSE</i> button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td><i>HOUSE</i> then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td><i>HOUSE</i> then <i>VOLUME</i> ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td><i>HOUSE</i> then <i>MUTE</i></td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.</td></tr><tr><td><i>HOUSE</i> then <i>SLEEP</i></td><td>Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i>, <i>SLEEP</i>, <i>CLEAR</i>, and then <i>DONE</i>.</td></tr><tr><td><i>HOUSE</i> then <i>OFF</i></td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the <i>ROOM</i> button to select each room and setting <i>SLEEP</i>.</i></p> <p><i>When two or more rooms are linked, adjusting the <i>SLEEP</i> time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	<i>HOUSE</i> then a source	Play the selected source in all connected rooms.	<i>HOUSE</i> then <i>VOLUME</i> ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	<i>HOUSE</i> then <i>MUTE</i>	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.	<i>HOUSE</i> then <i>SLEEP</i>	Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i> , <i>SLEEP</i> , <i>CLEAR</i> , and then <i>DONE</i> .	<i>HOUSE</i> then <i>OFF</i>	Turn off the entire system.
Press ...	To do this ...													
<i>HOUSE</i> then a source	Play the selected source in all connected rooms.													
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<i>HOUSE</i> then <i>OFF</i>	Turn off the entire system.													

[1] at 43:

Using more than one Personal™ music center

If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.

To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates *NO RESPONSE*.

[1] at 23:

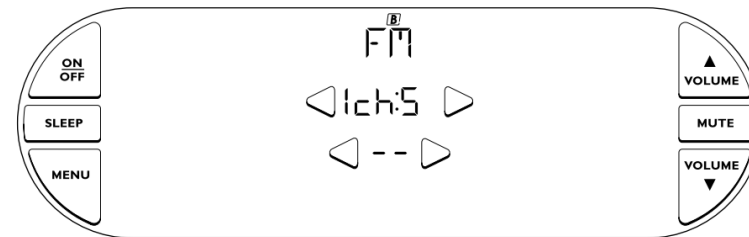
Using simulated surround for mono movie material

Bose® Videostage® decoding can process a one-channel program into five-speaker sound, directing the signals so that dialogue remains locked on-screen, while music and ambient effects fill the room. You experience a surround sensation, providing extra enjoyment when you watch older, pre-stereo movies. This feature can be used for mono TV, FM, and AM programs. It is automatically turned on when a Dolby Digital bitstream indicates that it contains a mono program.

For other mono program sources, you can engage or disengage this feature using the Personal™ music center. Press MENU and hold it until drc or 1ch:5 appears on the display. If drc is displayed, press either of the top ◀ or ▶ arrow buttons to select 1ch:5 (Figure 25). Then use the lower ◀ or ▶ arrow buttons to select between On or -- (Off). Initially, this feature is On for AM and off (--) for all other sources. If you change the setting for any source, the system is reset to these settings when you turn off a room.

Figure 25

Selecting five-speaker sound for a mono source

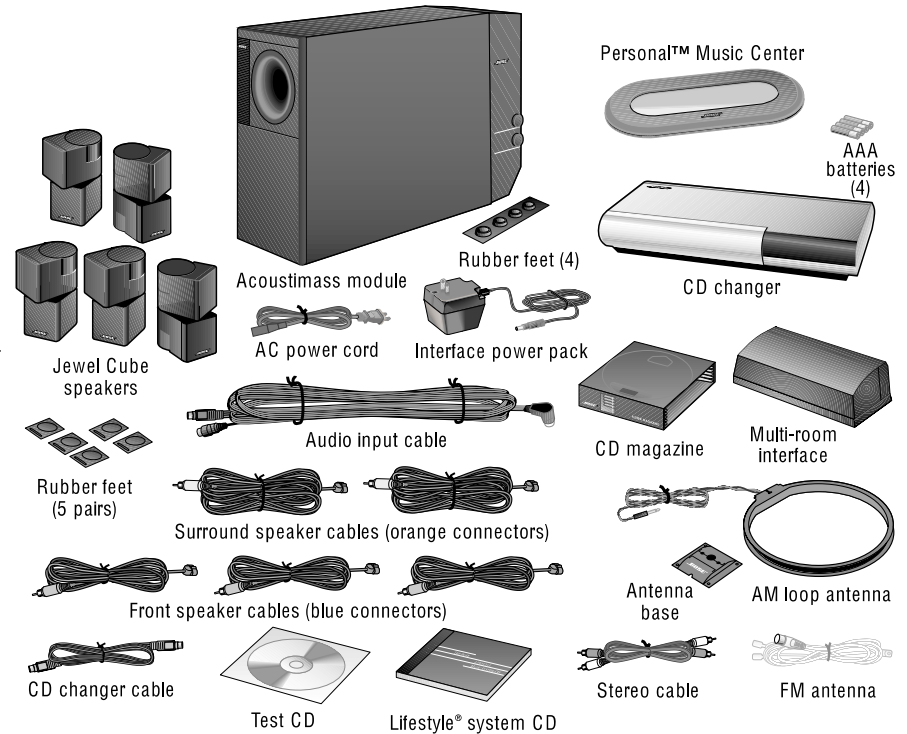


		<p>To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider A. Further discussion of obviousness of this claim element is provided in Google’s Invalidity Contentions Cover Pleading.</p>
[1e]	<p><i>(i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and</i></p>	<p>Bose Lifestyle includes receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked. For example:</p> <p>[1] at 4:</p> <p><i>Automatic sound level monitoring and control</i></p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

What comes with your Lifestyle® 50 system:

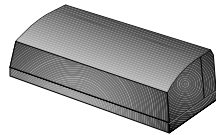
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle® system CD
- Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

Select a location for the multi-room interface. It may be placed out of sight if you like.

1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

		<p>[1] at 9:</p> <p><i>Connecting the Jewel Cube® speakers to the Acoustimass® module</i></p> <ol style="list-style-type: none"> 1. Match each cable to the corresponding speaker location. <ul style="list-style-type: none"> • Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end. • Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end. 2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack. 3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8). <ul style="list-style-type: none"> • Plug the blue connectors into the matching left front, center, and right front jacks. • Plug the orange connectors into the matching left surround and right surround jacks. <p>To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter (“barrel” connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.</p> <p>[1] at 10:</p>
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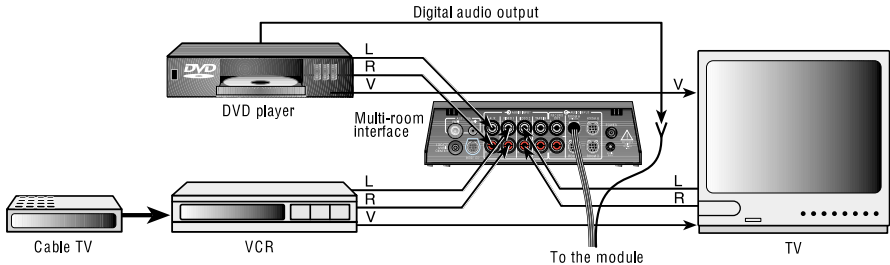
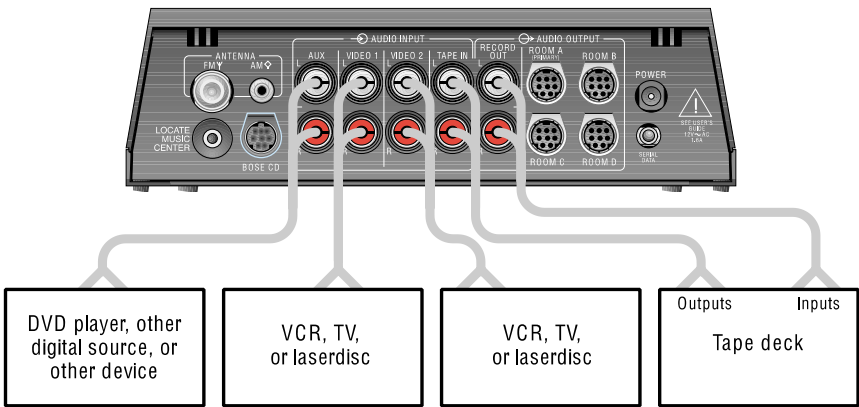
		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p> Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p> Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14
Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

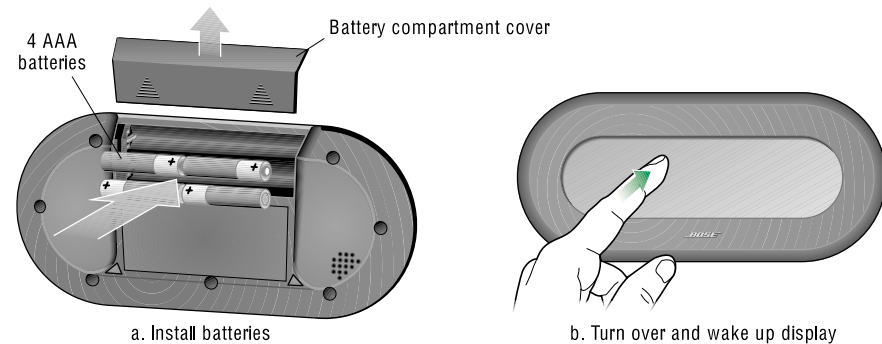
🎵 **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



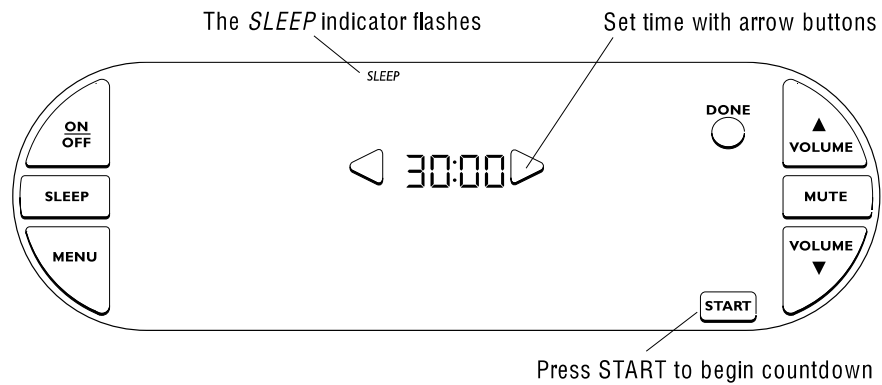
🎵 **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none">• To learn more about the display, see “Using the Personal music center display” on pages 20-21.• To operate the AM/FM radio, see “Listening to the radio” on pages 26-28.• To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD.• To control external components, see “Using the system with external components” on page 35.• To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

Using the Personal™ music center display

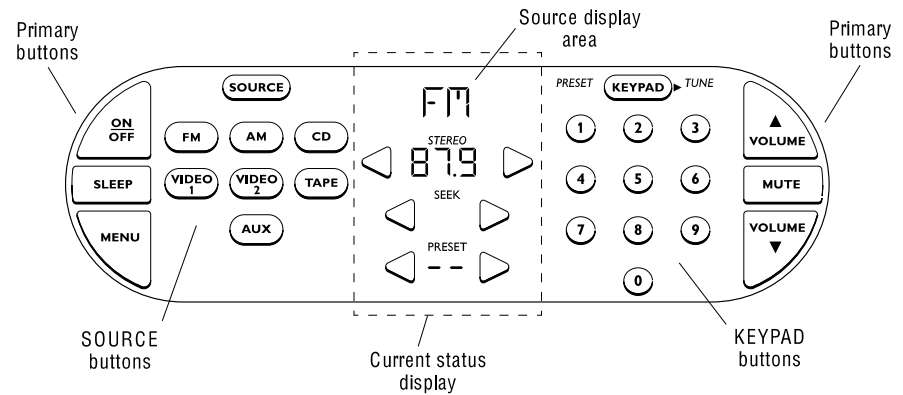
The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21

The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



[1] at 22:

Listening to the system

Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.

In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.

You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.

[1] at 22:

Adjusting center and surround levels

The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.

- The CENTER level can be adjusted to soften or emphasize center speaker image.
- The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear.

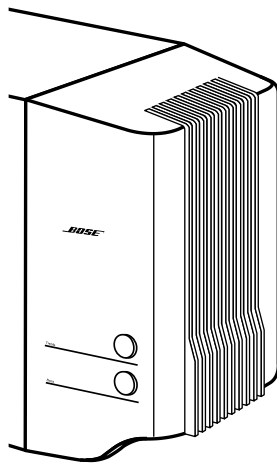
The system remembers the center and surround level settings for the room in which they were adjusted.

[1] at 36:

Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.

CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

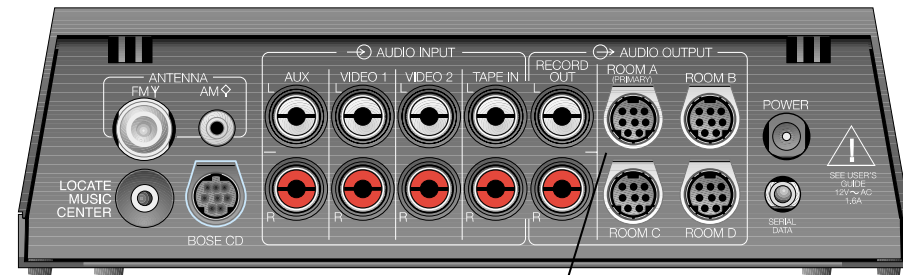
Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.

Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



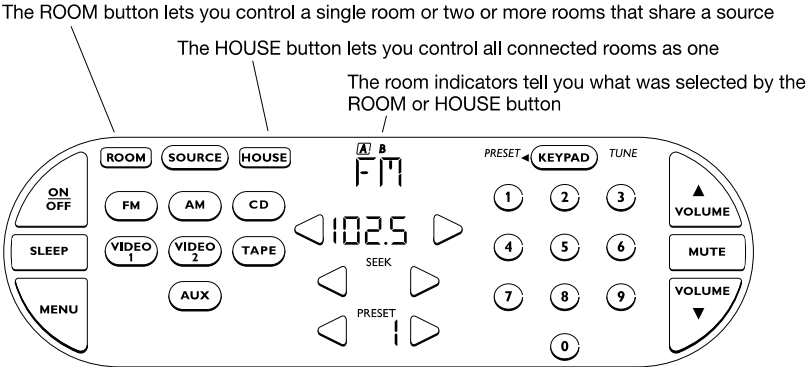
Room A, B, C, and D jacks

[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48
Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the HOUSE button</p> <p>Using the HOUSE button, you can link all rooms together and control them as one. When you press the HOUSE button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, VOLUME, MUTE, or SLEEP) affects every room. When you are done listening you can press OFF to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing HOUSE, pressing HOUSE again cancels HOUSE mode.</i></p> <p>Press the HOUSE button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td>HOUSE then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td>HOUSE then VOLUME ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td>HOUSE then MUTE</td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.</td></tr><tr><td>HOUSE then SLEEP</td><td>Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.</td></tr><tr><td>HOUSE then OFF</td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the ROOM button to select each room and setting SLEEP.</i></p> <p><i>When two or more rooms are linked, adjusting the SLEEP time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	HOUSE then a source	Play the selected source in all connected rooms.	HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.	HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.	HOUSE then OFF	Turn off the entire system.
Press ...	To do this ...													
HOUSE then a source	Play the selected source in all connected rooms.													
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HOUSE then OFF	Turn off the entire system.													

[1] at 43:

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If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.

To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates *NO RESPONSE*.

[1] at 23:

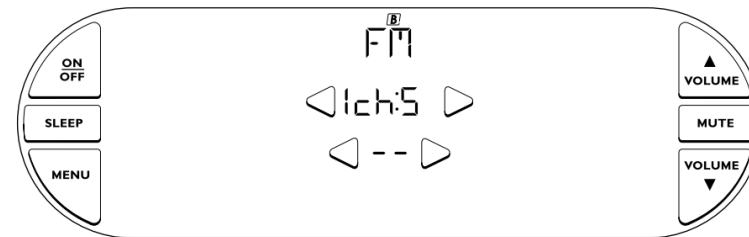
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Bose® Videostage® decoding can process a one-channel program into five-speaker sound, directing the signals so that dialogue remains locked on-screen, while music and ambient effects fill the room. You experience a surround sensation, providing extra enjoyment when you watch older, pre-stereo movies. This feature can be used for mono TV, FM, and AM programs. It is automatically turned on when a Dolby Digital bitstream indicates that it contains a mono program.

For other mono program sources, you can engage or disengage this feature using the Personal™ music center. Press MENU and hold it until drc or 1ch:5 appears on the display. If drc is displayed, press either of the top ◀ or ▶ arrow buttons to select 1ch:5 (Figure 25). Then use the lower ◀ or ▶ arrow buttons to select between On or -- (Off). Initially, this feature is On for AM and off (--) for all other sources. If you change the setting for any source, the system is reset to these settings when you turn off a room.

Figure 25

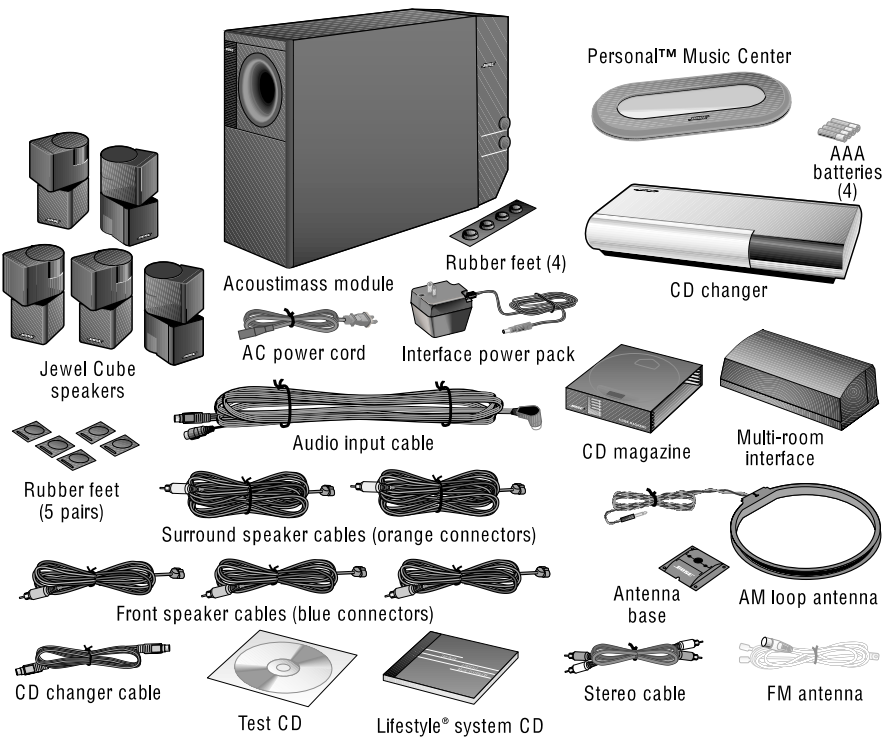
Selecting five-speaker sound for a mono source



		<p>To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider A, E, I. Further discussion of obviousness of this claim element is provided in Google’s Invalidity Contentions Cover Pleading.</p>
[1f]	<p><i>(ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;</i></p>	<p>Bose Lifestyle includes receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player. For example:</p> <p>[1] at 4:</p> <p><i>Automatic sound level monitoring and control</i></p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

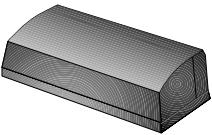
- What comes with your Lifestyle® 50 system:*
- Personal music center
 - CD changer
 - Multi-room interface
 - Interface power pack*
 - 5 Jewel Cube® speakers
 - 5 speaker cables
 - Acoustimass module
 - AC power (mains) cord*
 - 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
 - Audio input cable
 - CD changer cable
 - Stereo cable
 - 4 AAA batteries
 - FM antenna
 - AM loop antenna
 - AM antenna base
 - CD magazine
 - Lifestyle® system CD
 - Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

- Select a location for the multi-room interface. It may be placed out of sight if you like.
1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
 2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1] at 9:

Connecting the Jewel Cube® speakers to the Acoustimass® module

1. Match each cable to the corresponding speaker location.
 - Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end.
 - Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end.
2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack.
3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8).
 - Plug the blue connectors into the matching left front, center, and right front jacks.
 - Plug the orange connectors into the matching left surround and right surround jacks.

To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter (“barrel” connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.

[1] at 10:



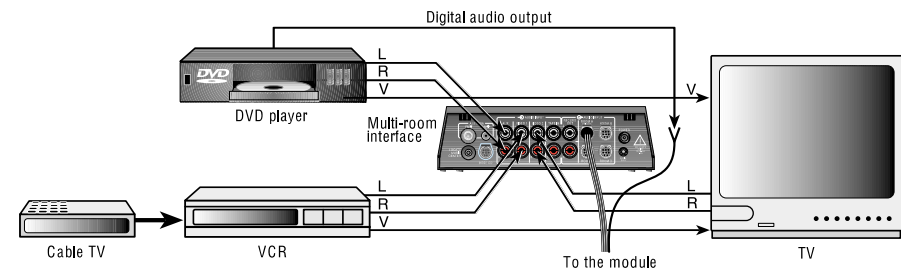
		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p> Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p> Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12

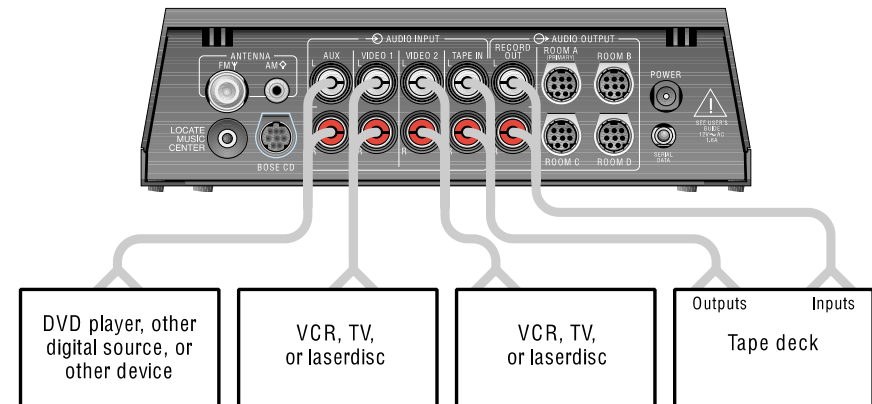
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14

Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

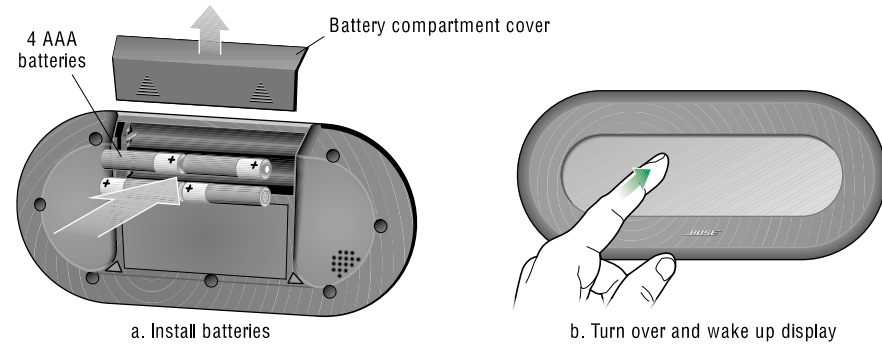
🎵 **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



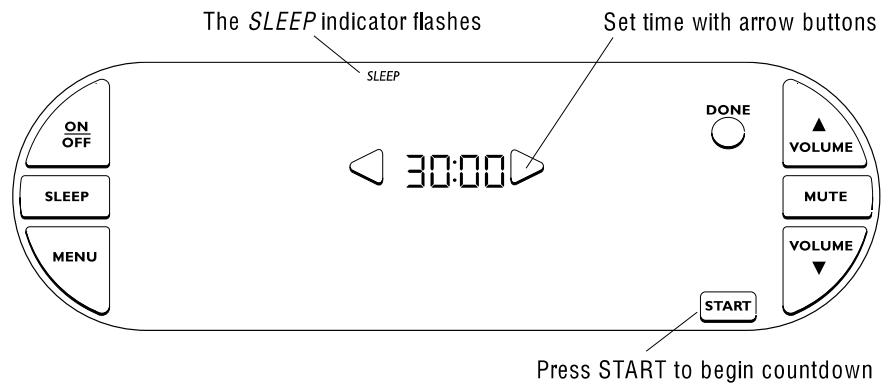
🎵 **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none">• To learn more about the display, see “Using the Personal music center display” on pages 20-21.• To operate the AM/FM radio, see “Listening to the radio” on pages 26-28.• To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD.• To control external components, see “Using the system with external components” on page 35.• To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

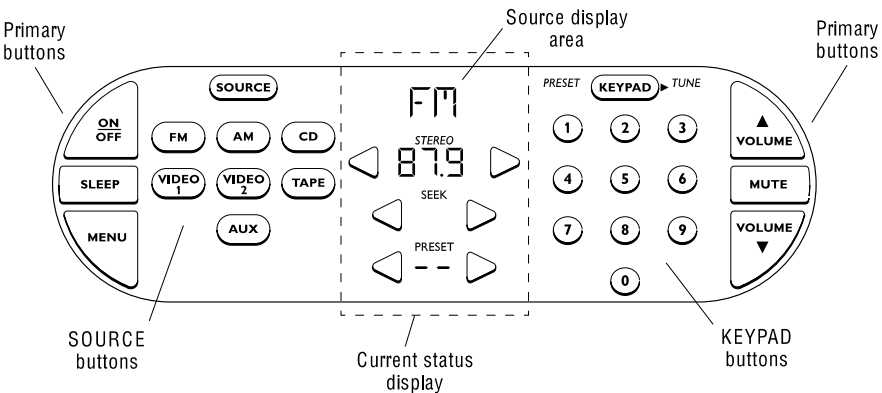
Using the Personal™ music center display

The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21
The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



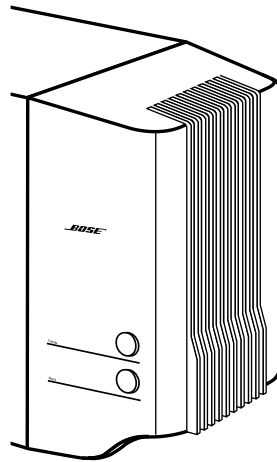
[1] at 22:

		<p><i>Listening to the system</i></p> <p>Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.</p> <p>In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.</p> <p>You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.</p> <p>[1] at 22:</p> <p><i>Adjusting center and surround levels</i></p> <p>The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.</p> <ul style="list-style-type: none"> • The CENTER level can be adjusted to soften or emphasize center speaker image. • The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear. <p>The system remembers the center and surround level settings for the room in which they were adjusted.</p> <p>[1] at 36:</p>
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Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.

CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

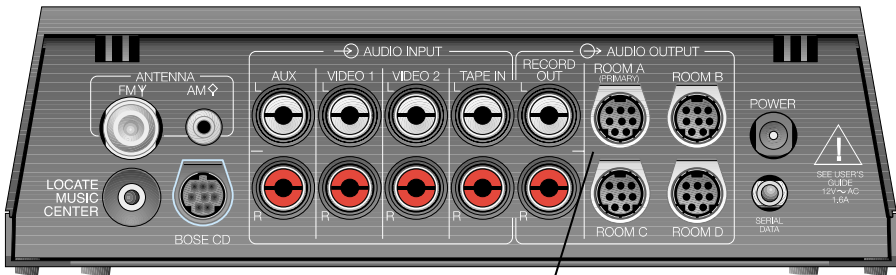
Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.

Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



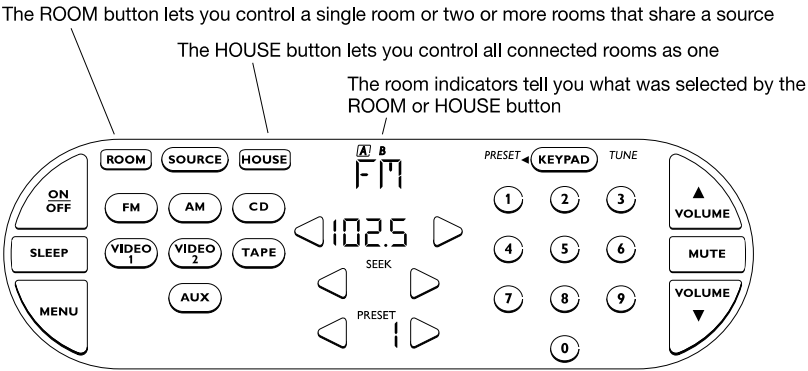
Room A, B, C, and D jacks

[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48
Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the HOUSE button</p> <p>Using the HOUSE button, you can link all rooms together and control them as one. When you press the HOUSE button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, VOLUME, MUTE, or SLEEP) affects every room. When you are done listening you can press OFF to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing HOUSE, pressing HOUSE again cancels HOUSE mode.</i></p> <p>Press the HOUSE button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td>HOUSE then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td>HOUSE then VOLUME ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td>HOUSE then MUTE</td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.</td></tr><tr><td>HOUSE then SLEEP</td><td>Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.</td></tr><tr><td>HOUSE then OFF</td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the ROOM button to select each room and setting SLEEP.</i></p> <p><i>When two or more rooms are linked, adjusting the SLEEP time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	HOUSE then a source	Play the selected source in all connected rooms.	HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.	HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.	HOUSE then OFF	Turn off the entire system.
Press ...	To do this ...													
HOUSE then a source	Play the selected source in all connected rooms.													
HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.													
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HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.													
HOUSE then OFF	Turn off the entire system.													

[1] at 43:

Using more than one Personal™ music center

If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.

To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates *NO RESPONSE*.

[1] at 23:

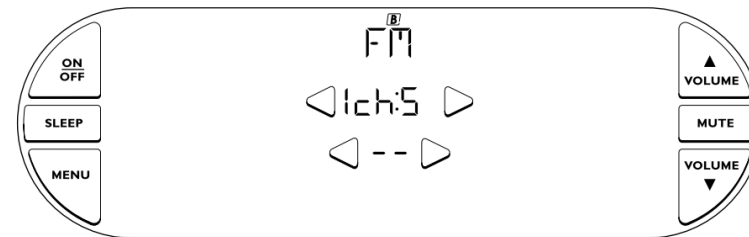
Using simulated surround for mono movie material

Bose® Videostage® decoding can process a one-channel program into five-speaker sound, directing the signals so that dialogue remains locked on-screen, while music and ambient effects fill the room. You experience a surround sensation, providing extra enjoyment when you watch older, pre-stereo movies. This feature can be used for mono TV, FM, and AM programs. It is automatically turned on when a Dolby Digital bitstream indicates that it contains a mono program.

For other mono program sources, you can engage or disengage this feature using the Personal™ music center. Press MENU and hold it until drc or 1ch:5 appears on the display. If drc is displayed, press either of the top ◀ or ▶ arrow buttons to select 1ch:5 (Figure 25). Then use the lower ◀ or ▶ arrow buttons to select between On or -- (Off). Initially, this feature is On for AM and off (--) for all other sources. If you change the setting for any source, the system is reset to these settings when you turn off a room.

Figure 25

Selecting five-speaker sound for a mono source

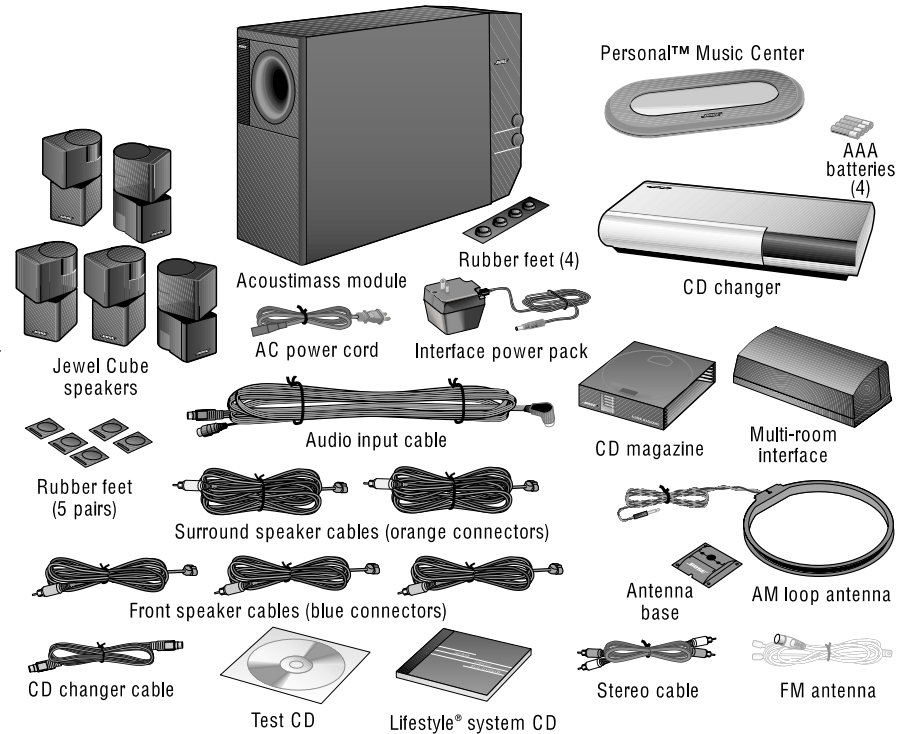


		<p>To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider A, D, E, H, I. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[1g]	<p><i>after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;</i></p>	<p>Bose Lifestyle includes after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation. For example:</p> <p>[1] at 4:</p> <p><i>Automatic sound level monitoring and control</i></p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

What comes with your Lifestyle® 50 system:

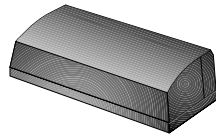
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle® system CD
- Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

Select a location for the multi-room interface. It may be placed out of sight if you like.

1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1] at 9:

Connecting the Jewel Cube® speakers to the Acoustimass® module

1. Match each cable to the corresponding speaker location.
 - Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end.
 - Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end.
2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack.
3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8).
 - Plug the blue connectors into the matching left front, center, and right front jacks.
 - Plug the orange connectors into the matching left surround and right surround jacks.

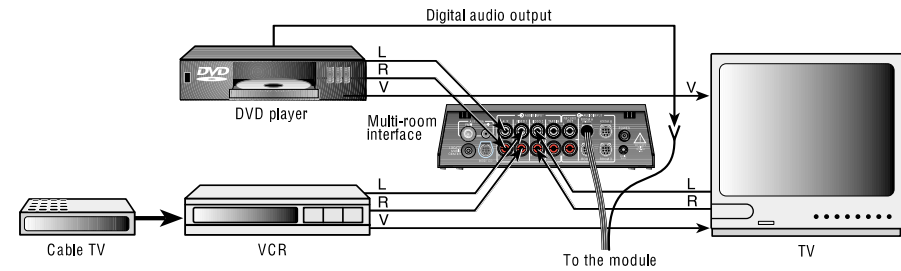
To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter (“barrel” connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.

[1] at 10:

		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p>🎵 Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p>🎵 Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12

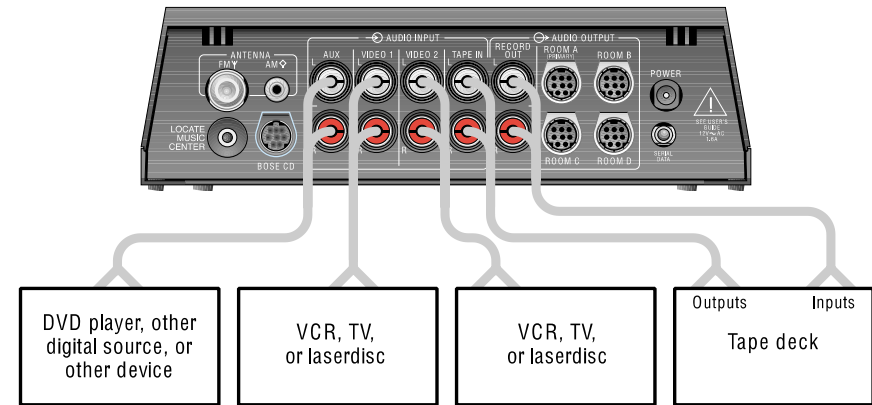
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14

Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

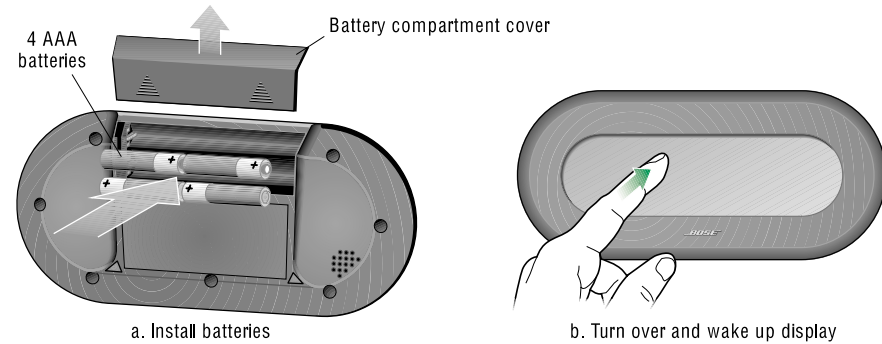
🎵 **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



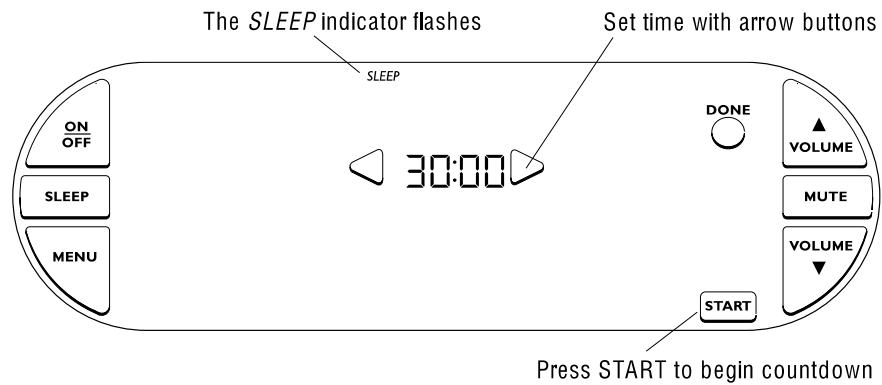
🎵 **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none">• To learn more about the display, see “Using the Personal music center display” on pages 20-21.• To operate the AM/FM radio, see “Listening to the radio” on pages 26-28.• To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD.• To control external components, see “Using the system with external components” on page 35.• To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

Using the Personal™ music center display

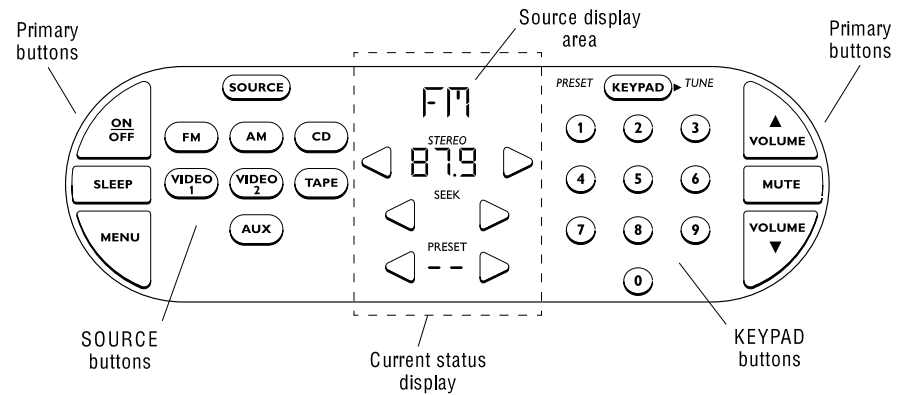
The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21

The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



[1] at 22:

Listening to the system

Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.

In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.

You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.

[1] at 22:

Adjusting center and surround levels

The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.

- The CENTER level can be adjusted to soften or emphasize center speaker image.
- The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear.

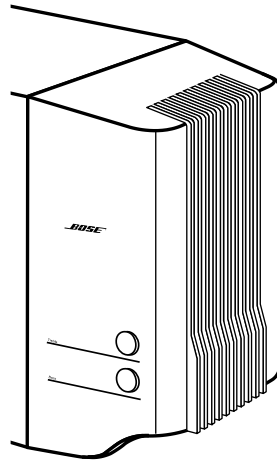
The system remembers the center and surround level settings for the room in which they were adjusted.

[1] at 36:

Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.



CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

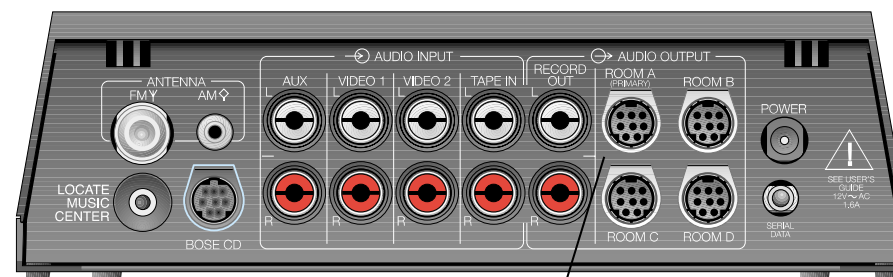
1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.



Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



Room A, B, C, and D jacks

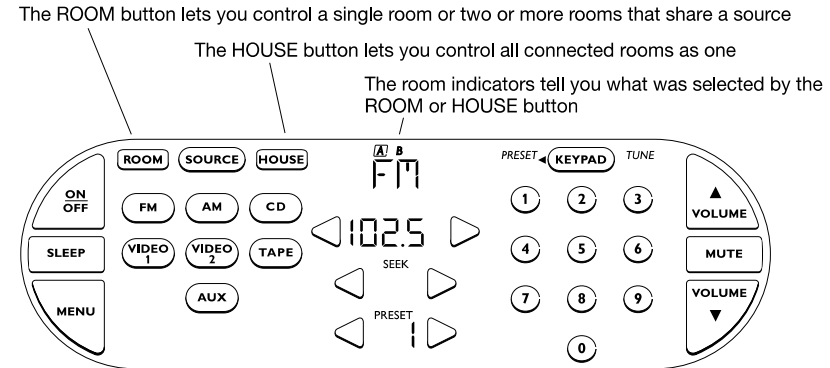
[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48

Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the <i>HOUSE</i> button</p> <p>Using the <i>HOUSE</i> button, you can link all rooms together and control them as one. When you press the <i>HOUSE</i> button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, <i>VOLUME</i>, <i>MUTE</i>, or <i>SLEEP</i>) affects every room. When you are done listening you can press <i>OFF</i> to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing HOUSE, pressing HOUSE again cancels HOUSE mode.</i></p> <p>Press the <i>HOUSE</i> button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td><i>HOUSE</i> then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td><i>HOUSE</i> then <i>VOLUME</i> ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td><i>HOUSE</i> then <i>MUTE</i></td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.</td></tr><tr><td><i>HOUSE</i> then <i>SLEEP</i></td><td>Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i>, <i>SLEEP</i>, <i>CLEAR</i>, and then <i>DONE</i>.</td></tr><tr><td><i>HOUSE</i> then <i>OFF</i></td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the ROOM button to select each room and setting SLEEP.</i></p> <p><i>When two or more rooms are linked, adjusting the SLEEP time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	<i>HOUSE</i> then a source	Play the selected source in all connected rooms.	<i>HOUSE</i> then <i>VOLUME</i> ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	<i>HOUSE</i> then <i>MUTE</i>	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.	<i>HOUSE</i> then <i>SLEEP</i>	Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i> , <i>SLEEP</i> , <i>CLEAR</i> , and then <i>DONE</i> .	<i>HOUSE</i> then <i>OFF</i>	Turn off the entire system.
Press ...	To do this ...													
<i>HOUSE</i> then a source	Play the selected source in all connected rooms.													
<i>HOUSE</i> then <i>VOLUME</i> ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.													
<i>HOUSE</i> then <i>MUTE</i>	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press <i>HOUSE</i> then <i>MUTE</i> again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a <i>HOUSE</i> - <i>MUTE</i> command, the other rooms remain silent until each one is unmuted individually. Pressing <i>HOUSE</i> then <i>VOLUME</i> ▲ unmutes all muted rooms.													
<i>HOUSE</i> then <i>SLEEP</i>	Set the <i>SLEEP</i> timer for all rooms that are on. The <i>SLEEP</i> time selected applies to all rooms that are on even if they are playing different sources. If the <i>SLEEP</i> timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the <i>HOUSE</i> - <i>SLEEP</i> command, press <i>HOUSE</i> , <i>SLEEP</i> , <i>CLEAR</i> , and then <i>DONE</i> .													
<i>HOUSE</i> then <i>OFF</i>	Turn off the entire system.													

[1] at 43:

Using more than one Personal™ music center

If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.

To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates *NO RESPONSE*.

[1] at 23:

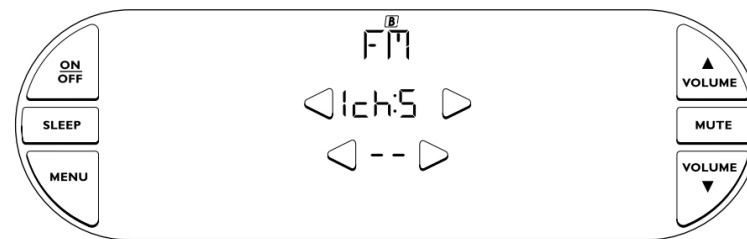
Using simulated surround for mono movie material

Bose® Videostage® decoding can process a one-channel program into five-speaker sound, directing the signals so that dialogue remains locked on-screen, while music and ambient effects fill the room. You experience a surround sensation, providing extra enjoyment when you watch older, pre-stereo movies. This feature can be used for mono TV, FM, and AM programs. It is automatically turned on when a Dolby Digital bitstream indicates that it contains a mono program.

For other mono program sources, you can engage or disengage this feature using the Personal™ music center. Press MENU and hold it until drc or 1ch:5 appears on the display. If drc is displayed, press either of the top ◀ or ▶ arrow buttons to select 1ch:5 (Figure 25). Then use the lower ◀ or ▶ arrow buttons to select between On or -- (Off). Initially, this feature is On for AM and off (--) for all other sources. If you change the setting for any source, the system is reset to these settings when you turn off a room.

Figure 25

Selecting five-speaker sound for a mono source

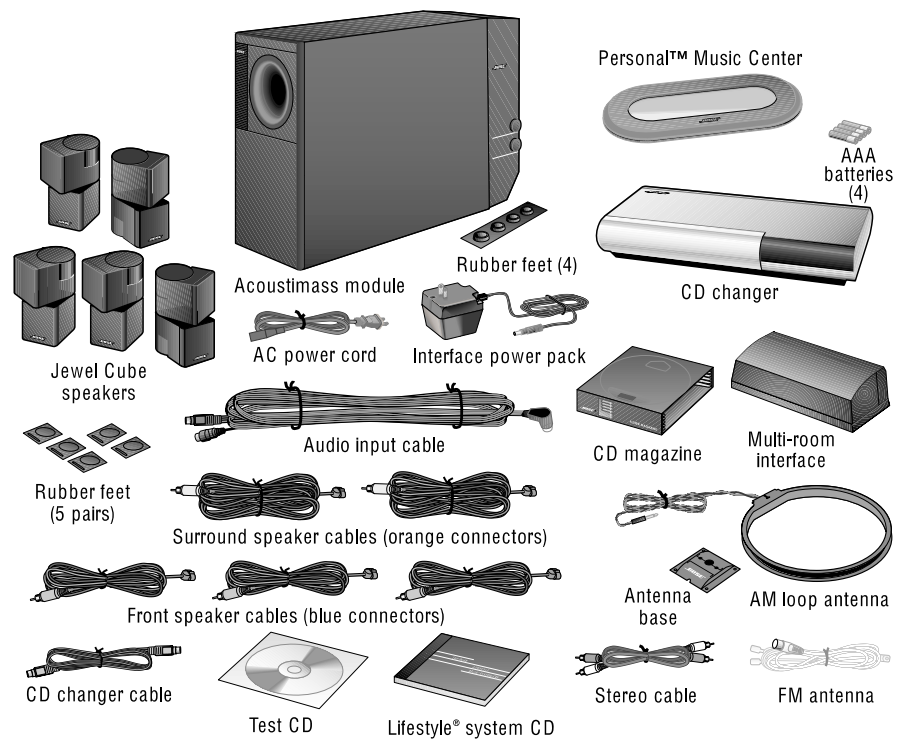


		<p>To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider A, E. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[1h]	<p><i>after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and</i></p>	<p>Bose Lifestyle includes after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players. For example:</p> <p>[1] at 4:</p> <p><i>Automatic sound level monitoring and control</i></p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

What comes with your Lifestyle® 50 system:

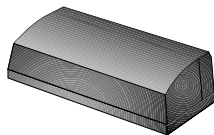
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle® system CD
- Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

Select a location for the multi-room interface. It may be placed out of sight if you like.

1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1] at 9:

Connecting the Jewel Cube® speakers to the Acoustimass® module

1. Match each cable to the corresponding speaker location.
 - Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end.
 - Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end.
2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack.
3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8).
 - Plug the blue connectors into the matching left front, center, and right front jacks.
 - Plug the orange connectors into the matching left surround and right surround jacks.

To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter (“barrel” connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.

[1] at 10:



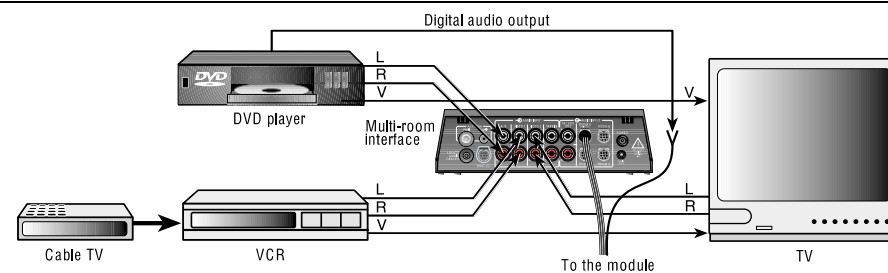
		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p> Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p> Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12

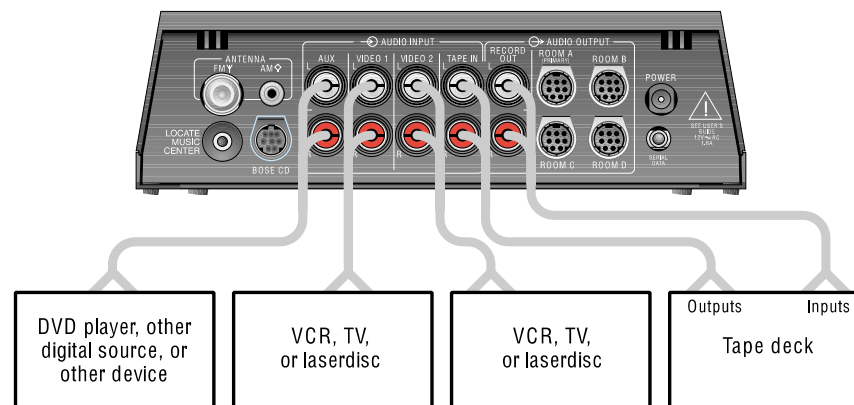
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14

Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

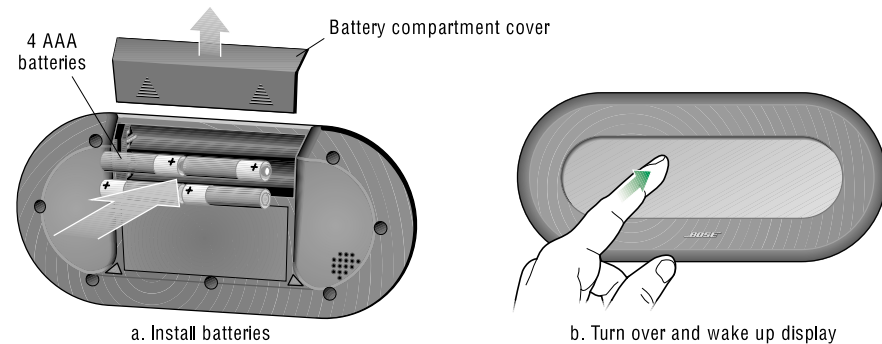
♪ **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



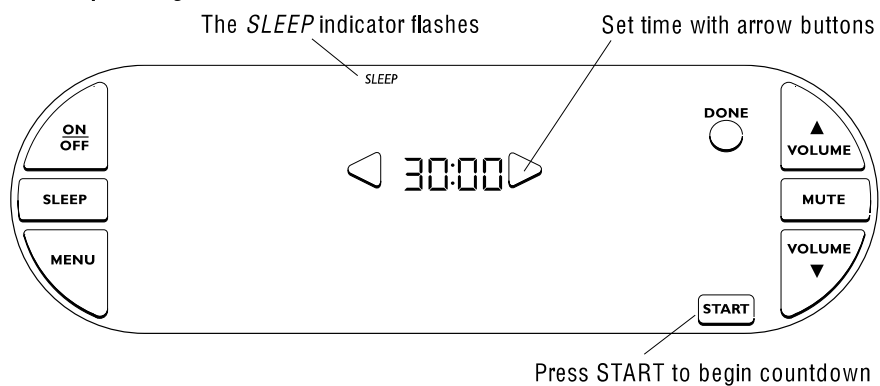
♪ **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none">• To learn more about the display, see “Using the Personal music center display” on pages 20-21.• To operate the AM/FM radio, see “Listening to the radio” on pages 26-28.• To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD.• To control external components, see “Using the system with external components” on page 35.• To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

Using the Personal™ music center display

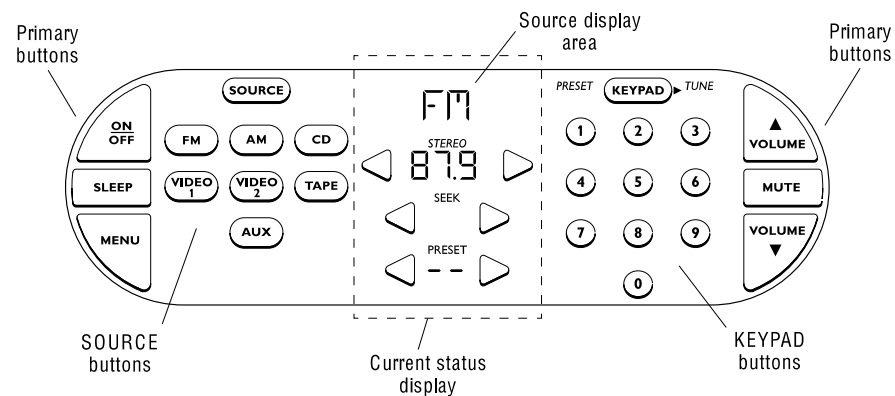
The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21

The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



[1] at 22:

Listening to the system

Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.

In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.

You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.

[1] at 22:

Adjusting center and surround levels

The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.

- The CENTER level can be adjusted to soften or emphasize center speaker image.
- The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear.

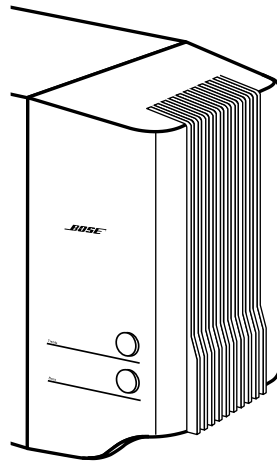
The system remembers the center and surround level settings for the room in which they were adjusted.

[1] at 36:

Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.



CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

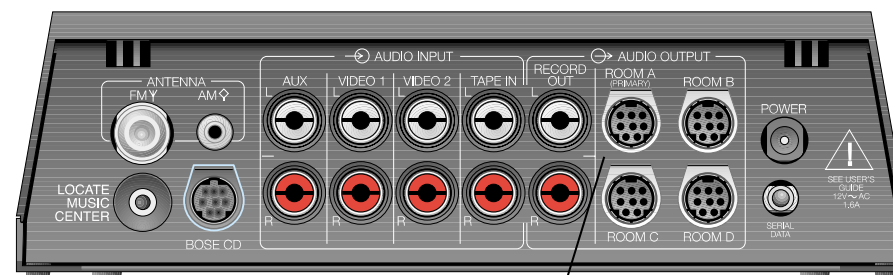
1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.



Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



Room A, B, C, and D jacks

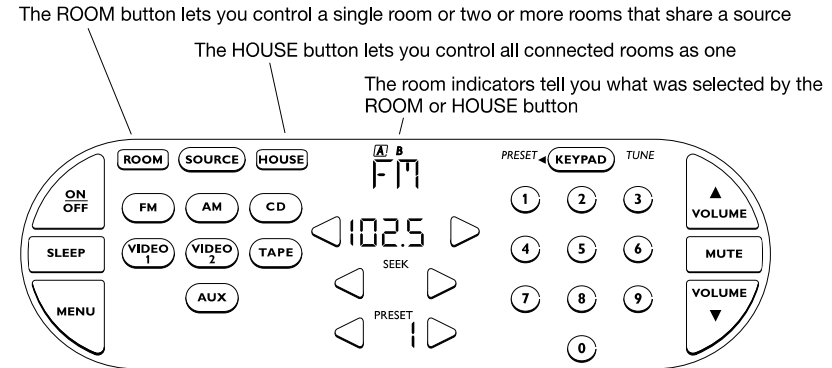
[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48

Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the HOUSE button</p> <p>Using the HOUSE button, you can link all rooms together and control them as one. When you press the HOUSE button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, VOLUME, MUTE, or SLEEP) affects every room. When you are done listening you can press OFF to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing HOUSE, pressing HOUSE again cancels HOUSE mode.</i></p> <p>Press the HOUSE button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td>HOUSE then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td>HOUSE then VOLUME ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td>HOUSE then MUTE</td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.</td></tr><tr><td>HOUSE then SLEEP</td><td>Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.</td></tr><tr><td>HOUSE then OFF</td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the ROOM button to select each room and setting SLEEP.</i></p> <p><i>When two or more rooms are linked, adjusting the SLEEP time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	HOUSE then a source	Play the selected source in all connected rooms.	HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.	HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.	HOUSE then OFF	Turn off the entire system.
Press ...	To do this ...													
HOUSE then a source	Play the selected source in all connected rooms.													
HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.													
HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.													
HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.													
HOUSE then OFF	Turn off the entire system.													

[1] at 43:

Using more than one Personal™ music center

If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.

To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates *NO RESPONSE*.

[1] at 23:

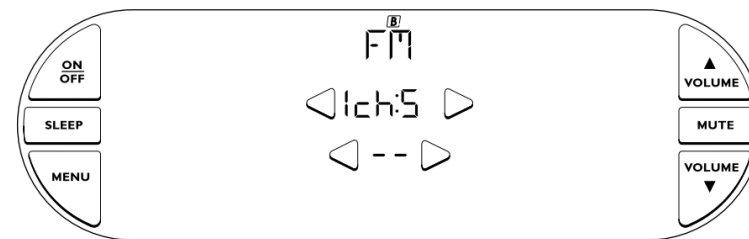
Using simulated surround for mono movie material

Bose® Videostage® decoding can process a one-channel program into five-speaker sound, directing the signals so that dialogue remains locked on-screen, while music and ambient effects fill the room. You experience a surround sensation, providing extra enjoyment when you watch older, pre-stereo movies. This feature can be used for mono TV, FM, and AM programs. It is automatically turned on when a Dolby Digital bitstream indicates that it contains a mono program.

For other mono program sources, you can engage or disengage this feature using the Personal™ music center. Press MENU and hold it until drc or 1ch:5 appears on the display. If drc is displayed, press either of the top ◀ or ▶ arrow buttons to select 1ch:5 (Figure 25). Then use the lower ◀ or ▶ arrow buttons to select between On or -- (Off). Initially, this feature is On for AM and off (--) for all other sources. If you change the setting for any source, the system is reset to these settings when you turn off a room.

Figure 25

Selecting five-speaker sound for a mono source

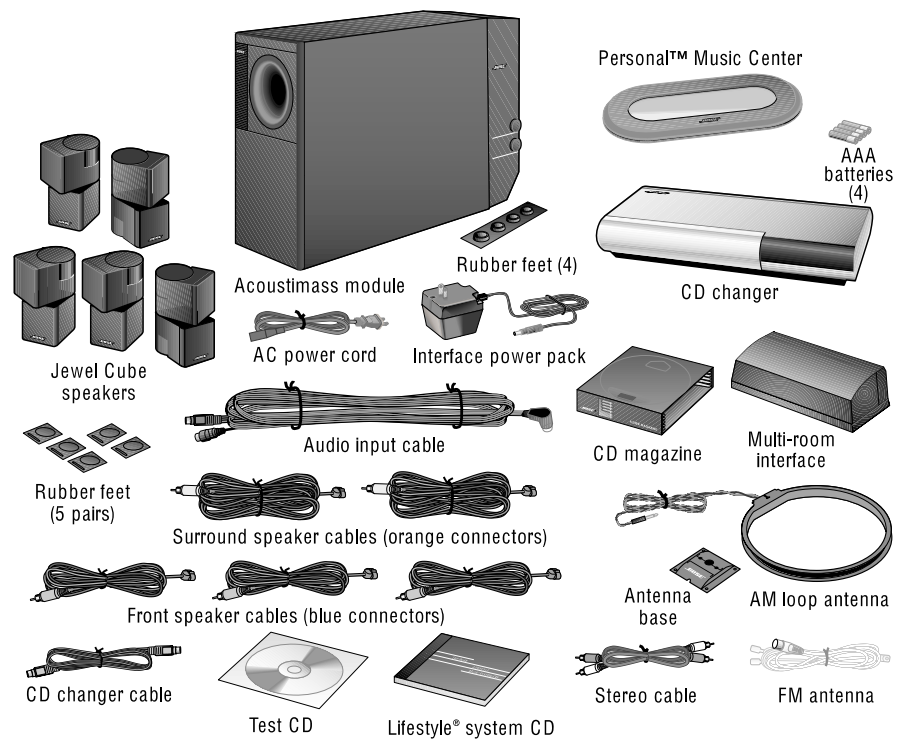


		<p>To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider A, D, E, H, I. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[3Pre]	<p><i>The first zone player of claim 2, wherein the instruction is a first instruction, and wherein the first zone player further comprises program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:</i></p>	<p>The disclosures in claim 2 are hereby incorporated by reference. In addition, Bose Lifestyle includes wherein the instruction is a first instruction, and wherein the first zone player further comprises program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions. For example:</p> <p>[1] at 4:</p> <p><i>Automatic sound level monitoring and control</i></p> <p>Your enjoyment of movies is enhanced by Digital Dynamic Range® compression. This technology automatically monitors and adjusts the volume to let you to hear soft sounds, particularly dialogue, but prevents you from being overwhelmed by loud special effects. This is especially useful for late night viewing – it eliminates the need to constantly adjust the volume.</p> <p>[1] at 6:</p> <p>When you place your speakers according to the guidelines below, a combination of reflected and direct sound provides the audio atmosphere of a home theater. You may experiment with the placement and orientation of the Jewel Cube® speakers and Acoustimass® module to produce the sound most pleasing to you. For more discussion of speaker placement and room acoustics, see “Fine-tuning your system” on page 36.</p>

Figure 1

What comes with your Lifestyle® 50 system:

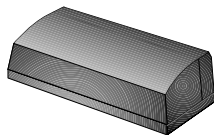
- Personal music center
- CD changer
- Multi-room interface
- Interface power pack*
- 5 Jewel Cube® speakers
- 5 speaker cables
- Acoustimass module
- AC power (mains) cord*
- 14 self-adhesive rubber feet (4 for the module and 5 pairs for the Jewel Cube speakers)
- Audio input cable
- CD changer cable
- Stereo cable
- 4 AAA batteries
- FM antenna
- AM loop antenna
- AM antenna base
- CD magazine
- Lifestyle® system CD
- Test CD



[1] at 8:

Figure 5

The multi-room interface



Multi-room interface

Select a location for the multi-room interface. It may be placed out of sight if you like.

1. Place the multi-room interface within 30 feet (9.1 m) of the Acoustimass module (the length of the audio input cable).
2. Place the multi-room interface close enough to the sound sources (TV, VCR, DVD, etc.) to allow for cable length. If you need additional audio and/or video cables to connect all of your components, see your dealer or call Bose® Customer Service.

[1] at 9:

Connecting the Jewel Cube® speakers to the Acoustimass® module

1. Match each cable to the corresponding speaker location.
 - Front speaker cables have blue RCA connectors at one end, with L, R, or C molded into both the RCA connectors and the Jewel Cube connectors at the other end.
 - Surround speaker cables have orange RCA connectors at one end, with L or R molded into both the RCA connectors and the Jewel Cube connectors at the other end.
2. Insert the Jewel Cube connector of each cable fully into the jack on the rear of one of the five speakers (Figure 7). Match the ridge of the connector to the notch at the top of the jack.
3. Connect each cable to the corresponding jack on the Acoustimass module (Figure 8).
 - Plug the blue connectors into the matching left front, center, and right front jacks.
 - Plug the orange connectors into the matching left surround and right surround jacks.

To lengthen the cable, connect speaker wire with male phono (RCA) plugs on each end to your supplied speaker cable. Use a female-to-female adapter ("barrel" connector). Or, splice in 18-gauge (.75 mm²) or thicker cord (connecting + to + and – to –). To purchase extension wire, see your dealer or electronics store, or call Bose® Customer Service.

[1] at 10:



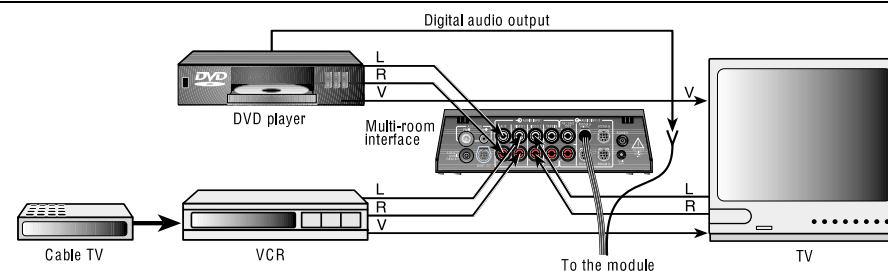
		<p>Connecting the Acoustimass® module to the multi-room interface</p> <p>Connect the module to the interface with the audio input cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Insert the right-angle multi-pin connector on the audio input cable into the AUDIO INPUT jack on the module. Align the connector at the angle shown in Figure 8. 2. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM A (PRIMARY) on the back of the interface. <p> Note: The female RCA connector on the audio input cable is for connecting the digital output of a DVD player or other digital source to the system. See “Setting up a digital sound source” on page 12.</p> <p> Note: Be sure that each connector is inserted completely into each jack.</p> <p>For information on connecting multi-room systems, see “Connecting additional rooms” on page 40.</p> <p>Connecting the CD changer to the multi-room interface</p> <p>Connect the CD changer to the interface with the CD changer cable (Figure 8).</p> <ol style="list-style-type: none"> 1. Plug a blue multi-pin connector (flat side facing up) into the jack marked BOSE CD on the back of the interface. 2. Plug the other blue multi-pin connector (flat side facing left) into the jack marked BOSE CD on the back of the CD changer. <p>[1] at 13:</p> <p>How to set up your home theater</p> <p>There are two basic methods for setting up your home theater. It is best to connect components directly to the Lifestyle® 50 multi-room interface, and select the sound source using the Personal™ music center. A second option is to use a stereo TV as the switching center to select the sound source. In each example, the analog outputs from the DVD player or other digital device are connected to the AUX inputs. You may need extra long audio cables or extensions for some of these connections.</p>
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Figure 12

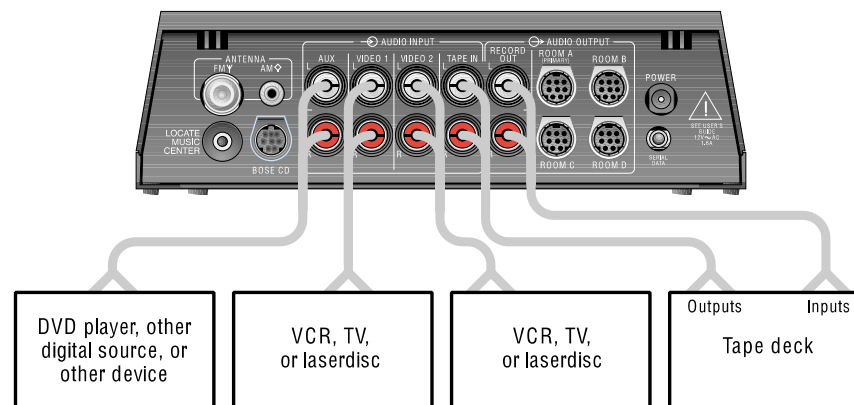
Preferred home theater connections to the Lifestyle® 50 system



[1] at 15:

Figure 14

Connecting external components



[1] at 17:

Setting up the Personal™ music center

Set up the Personal music center after the rest of the system is connected and plugged in.

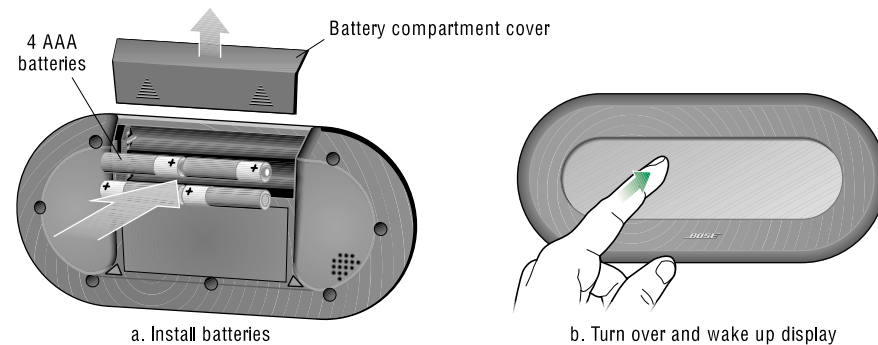
♪ **Note:** When batteries are first installed in the music center, it sets up a radio-frequency link with the closest multi-room interface.

1. Hold the music center within a few feet of the multi-room interface.
2. Slide open the battery compartment on the back of the music center (Figure 17).
3. Insert 4 AAA or IEC-R03 1.5V batteries, or the equivalent, as shown. Match the + and – symbols on the batteries with the + and – markings inside the compartment.
4. Slide the battery compartment cover back into place.
5. Turn the music center over and touch the screen to wake it up if it appears blank. Press ON/OFF, FM, or any other source button to turn the system on.

If the music center continuously displays “NO RESPONSE,” you need to try to establish its link with the multi-room interface again. Hold the music center close to the multi-room interface. Press and hold MUTE for about 5 seconds until you hear a beep and then release. After about 10 seconds, the music center should beep twice to confirm that the link is established.

Figure 17

Installing batteries and waking up the display for the first time



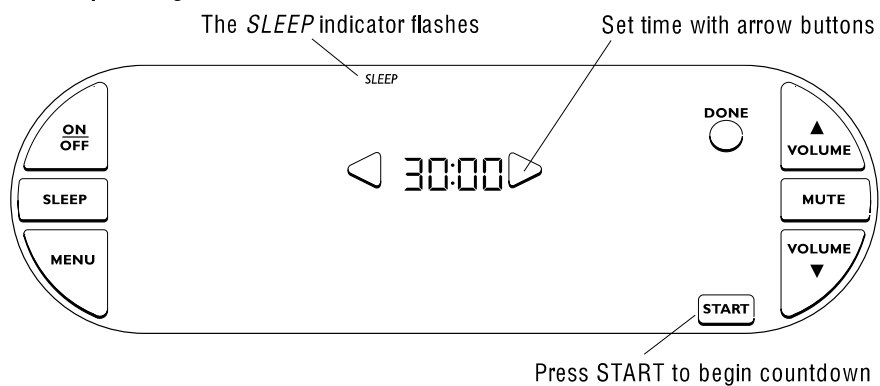
♪ **Note:** Replace the batteries when the LOW BATTERY message first appears. See “Replacing batteries” on page 44. Alkaline batteries are recommended.

[1] at 18:

		<p><i>Turning on the system</i></p> <p>You are ready to enjoy your new Lifestyle® system. Your Personal™ music center places complete control of the system operations in your hands. The center is portable, communicating with the rest of the system through a two-way radio-frequency link. The display is backlit for easy viewing, and provides visual feedback of current system operations and available options. To allow for maximum battery life, the display and backlight turn off a short time after your last button press. You only need to touch the screen to wake up the music center.</p> <ul style="list-style-type: none">• To learn more about the display, see “Using the Personal music center display” on pages 20-21.• To operate the AM/FM radio, see “Listening to the radio” on pages 26-28.• To operate the CD changer, see “Listening to compact discs” on pages 29-34. To verify your system setup, listen to the instructions on the Test CD.• To control external components, see “Using the system with external components” on page 35.• To use your system in multiple rooms, see “Operating in more than one room” on pages 41-43. <p>[1] at 19:</p>
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Using the sleep timer

- Press the SLEEP button to access the sleep timer for automatic shutoff. The display flashes a sleep time of 30 minutes or the most recent sleep time setting (Figure 20). The *SLEEP* indicator is also flashing.
- Use the arrow buttons to set the sleep timer to 1 to 99 minutes.
- Press the START button to start the counter. The START button disappears and a CLEAR button appears at the bottom of the display.

Before pressing START ...

[1] at 20:

Using the Personal™ music center display

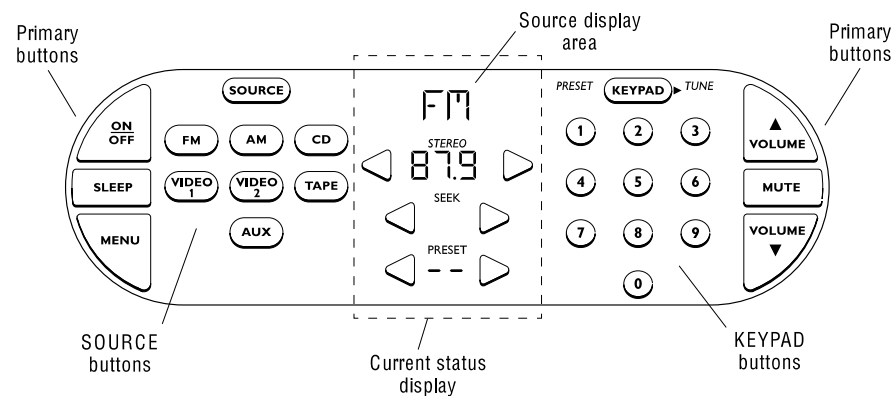
The music center display provides information on the system functions. The display offers different combinations of buttons to provide control of the function you are using. Sometimes an item on the display will flash to provide information about a system function. When an item flashes faster, it is alerting you to a needed action.

Using the primary buttons

The primary buttons (ON/OFF, SLEEP, MENU, VOLUME, and MUTE) are located at the left and right sides of the display.

Figure 21

The display showing the primary buttons, SOURCE buttons, and KEYPAD buttons



[1] at 22:

Listening to the system

Your Lifestyle® 50 system uses digital signal processing to bring even greater realism and impact to both movies and music recordings. Built-in Dolby Digital decoding delivers up to 5.1 discrete audio channels (that is, five for the independent Jewel Cube® speakers and one for rich bass from the Acoustimass® module) from DVD, digital TV, next-generation cable boxes, and satellite receivers. With analog formats, as well as for two-channel PCM and Dolby Digital bitstreams, Videostage® decoding steers front information to the left, center, and right, and directs surround information to the left and right rear channels. As a result, the sound of stereo broadcasts and rented or recorded tapes can approach that of your DVD discs.

In addition, Videostage decoding can process a one-channel program and direct five-channel sound to five independent speakers. Dialogue remains locked on-screen, while music and ambient effects fill the room to increase your listening enjoyment.

You may choose to listen through two, three, or five speakers. Traditional stereo may be enjoyed through two or more speakers. Listening through three or five speakers helps anchor the dialogue of movies to the picture and provides a more solid image for music vocals. For the greatest surround effect, listening through five speakers gives you the most convincing sound experience.

[1] at 22:

Adjusting center and surround levels

The SPEAKERS selection display (Figure 23) also allows you to adjust the volume levels of the center and surround speakers. At the factory, these levels are set to zero. To adjust them, press the MENU button until SPEAKERS is displayed. Then use the ◀ or ▶ arrow buttons to adjust the levels.

- The CENTER level can be adjusted to soften or emphasize center speaker image.
- The SURROUND level can be adjusted to move the surround information forward in the room or further to the rear.

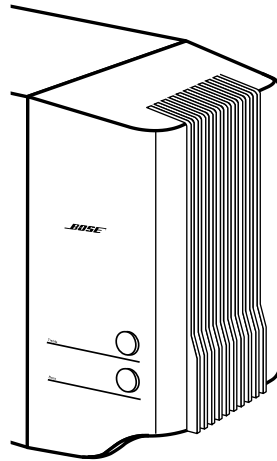
The system remembers the center and surround level settings for the room in which they were adjusted.

[1] at 36:

Fine-tuning your system

Figure 39

Treble and bass controls



In most situations, you only need to follow the speaker placement guidelines (see “Setting Up” on pages 6-8) for your system to provide excellent sound quality. You do not need to adjust tone settings for changes in volume, since Bose® patented integrated signal processing provides a natural tonal balance over the full range of volume settings.

If desired, you can further fine-tune your system as described here.

Adjusting speaker controls

The Lifestyle® 50 system treble and bass controls are located on the Acoustimass® module (Figure 39). They allow you to adjust the treble (high frequencies) and bass (low frequencies). In the normal setting, the dots on each control are in the 12 o'clock position. You can also locate the normal setting by feeling when the control settles into the notch at this position. Turn the controls clockwise to increase, and counterclockwise to decrease, the amount of treble or bass.

Compensating for room acoustics

The acoustics (sound qualities) of your room can affect the overall sound quality of any speaker system. In general, you can reduce many problems with acoustics by the careful use of the treble and bass controls.

Too much or too little treble

Rooms that reflect a lot of sound, especially those with bare floors and walls, may sound overly shrill or “bright.” Turning down the treble control (toward –) decreases treble sound.

Rooms with a lot of sound-absorbing furnishings, such as upholstered furniture, wall-to-wall carpet, or heavy drapes, may sound muffled or dull. Moving speakers further away from soft furnishings increases treble. You can increase treble sound by slightly turning up the treble control (toward +).

Too much or too little bass

You can decrease bass sound by turning down the bass control (toward –). To increase bass, turn up the bass control (toward +). Acoustimass module placement also affects the amount of bass you hear. Placing the module closer to the corner of the room increases bass. Moving the module away from the corner decreases bass.

[1] at 40:

Connecting additional rooms

Follow the placement guidelines for the Bose® powered speakers that you plan to connect. Then review your plan for how to connect these speakers to the multi-room interface in your primary room. If you have questions or need extension cables to complete the connections, call Bose Customer Service at the numbers listed on the back inside cover of this owner's guide.



CAUTION: Make sure all components are unplugged from the power outlet before you begin hooking up additional speakers.

Connect the audio input cable from your additional powered speakers to the selected ROOM jack on the back of the multi-room interface.

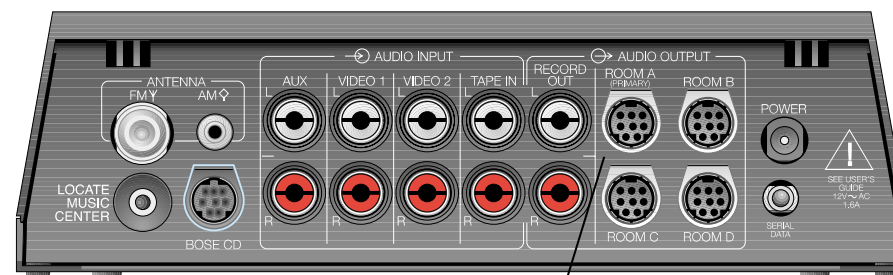
1. Plug the small black multi-pin connector (flat side facing up) into the jack marked ROOM B, C, or D on the back of the interface.
2. Follow the instructions that came with your speakers for connecting the cable to the speakers.



Note: Be sure that each connector is inserted completely into each jack.

Figure 47

ROOM jacks on the multi-room interface



Room A, B, C, and D jacks

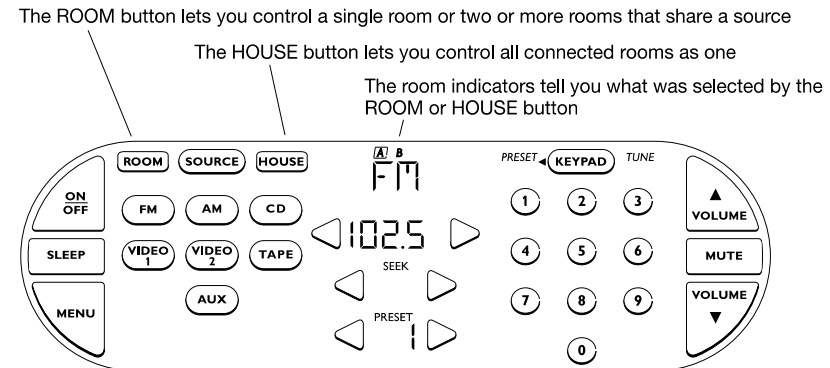
[1] at 41:

Operating in more than one room

Your Lifestyle® 50 system can control up to four sets of Bose® powered speakers, allowing your family to enjoy different audio sources (CD, radio, TV, etc.) in up to four rooms. These rooms are referred to as room A, B, C, and D, with room A being the primary room (the one used for a one-room system). If two or more rooms are connected to your system, the Personal™ music center displays ROOM and HOUSE buttons, and room indicators (A, B, C, and/or D). Figure 48 shows an example display for a two-room system.

Figure 48

Example display for a two-room system



Understanding the room indicators

- ☒ A boxed letter indicates the presently-selected room or rooms. The selected room is affected by any source changes, or any change you make using the VOLUME, MUTE, ON/OFF, or SLEEP buttons.
- ☐ B An unboxed letter indicates a room listening to a **shared source**. A shared source is one that is playing in the controlled room as well as in up to three additional rooms. If you change the radio station, CD track, etc., of the shared source, the change affects all rooms sharing this source. However, you cannot change sources for all affected rooms at the same time. The VOLUME, MUTE, ON/OFF, and SLEEP buttons only affect the boxed room(s).
- ☐ An empty box appears for each connected room when you press the HOUSE button. When you change the volume in the HOUSE mode, the numerical level appearing on the display does not represent the actual volume level in all connected rooms. It only represents the actual volume in rooms represented by a boxed letter.

[1] at 42:

Using the ROOM button

The ROOM button allows you to select any connected room and control any sound source you want to hear in that room. Each time you press the ROOM button you can transfer control from one room to the next in A-B-C-D order. The room indicators on the display tell you what is currently selected. Rooms listening to a shared source can be linked and controlled as one room.

Turning on different sources in more than one room

Let's say you have a two-room system (rooms A and B) and the entire system is off. To turn on a different source in each room:

1. Wake up the Personal™ music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press a source button, such as VIDEO 1, to turn on the system and listen to your DVD player in room A. Adjust the volume to the desired level.
3. Press the ROOM button again. The room indicator **[B]** is displayed. Press a different source button, such as CD, to listen to a CD in room B. Again, adjust the volume to the desired level.
4. Press the ROOM button again and notice that the room indicator **[A]** is displayed. You are controlling room A once again and the displays indicates that the VIDEO 1 source is on.

Setting up a shared source

Now, let's say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **[A]** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **[B]**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A [B]** are displayed.
4. Press the ROOM button again. The indicators **[A] [B]** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

Note: Remember that there are limits to using different sources in different rooms. With one tuner, the system cannot play one radio station in one room and another radio station in another. Similarly, with one CD changer, the system cannot play two different CDs at the same time.

Linking rooms for common control

There are two ways to link rooms in order to control them as one.

- Set up a shared source in two or more rooms and select them together using the ROOM button. See "Setting up a shared source" above.
- Link all connected rooms using the HOUSE button. See "Using the HOUSE button" on page 43.

Returning to single-room control

After you have gained control of multiple rooms using the ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM until the room you want is displayed (**[A]**, **[B]**, **[C]**, or **[D]**). Control that room as desired.

		[1] at 43:
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		<p>Using the HOUSE button</p> <p>Using the HOUSE button, you can link all rooms together and control them as one. When you press the HOUSE button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, VOLUME, MUTE, or SLEEP) affects every room. When you are done listening you can press OFF to turn off the entire system.</p> <p>Note: <i>If you do not press any additional buttons after pressing HOUSE, pressing HOUSE again cancels HOUSE mode.</i></p> <p>Press the HOUSE button before each command to apply that command to all rooms:</p> <table><tr><th>Press ...</th><th>To do this ...</th></tr><tr><td>HOUSE then a source</td><td>Play the selected source in all connected rooms.</td></tr><tr><td>HOUSE then VOLUME ▲▼</td><td>Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.</td></tr><tr><td>HOUSE then MUTE</td><td>Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.</td></tr><tr><td>HOUSE then SLEEP</td><td>Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.</td></tr><tr><td>HOUSE then OFF</td><td>Turn off the entire system.</td></tr></table> <p>Note: <i>Instead of setting the whole house to one sleep time, you can set different sleep times for individual rooms by using the ROOM button to select each room and setting SLEEP.</i></p> <p><i>When two or more rooms are linked, adjusting the SLEEP time affects all linked rooms (indicated by boxed letters).</i></p>	Press ...	To do this ...	HOUSE then a source	Play the selected source in all connected rooms.	HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.	HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.	HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.	HOUSE then OFF	Turn off the entire system.
Press ...	To do this ...													
HOUSE then a source	Play the selected source in all connected rooms.													
HOUSE then VOLUME ▲▼	Adjust the volume up or down by the same amount in all rooms that are on, or all connected rooms if they are all off. The system remembers the differences among the original room volume settings.													
HOUSE then MUTE	Silence all connected rooms that are on, even if any were previously muted individually. To cancel this command, press HOUSE then MUTE again. Any rooms that were muted before this command was given stay silent until individually unmuted. If you unmute an individual room after it was muted by a HOUSE - MUTE command, the other rooms remain silent until each one is unmuted individually. Pressing HOUSE then VOLUME ▲unmutes all muted rooms.													
HOUSE then SLEEP	Set the SLEEP timer for all rooms that are on. The SLEEP time selected applies to all rooms that are on even if they are playing different sources. If the SLEEP timer was already set in one or more rooms, the display shows the longest time already set. You can accept this time or change it for all the rooms. To cancel the HOUSE - SLEEP command, press HOUSE, SLEEP, CLEAR, and then DONE.													
HOUSE then OFF	Turn off the entire system.													

[1] at 43:

Using more than one Personal™ music center

If you have a multi-room system, you can add additional music centers for some or all of the connected rooms. Each multi-room interface can be controlled by a maximum of four music centers. Each music center can control up to four rooms.

To add a new music center to your system, follow the setup instructions on page 17. Be sure to install the batteries and turn it on for the first time close to the multi-room interface to allow the new music center to set up a radio frequency link with your system. If the multi-room interface is not plugged in or the music center is out of range, the display indicates *NO RESPONSE*.

[1] at 23:

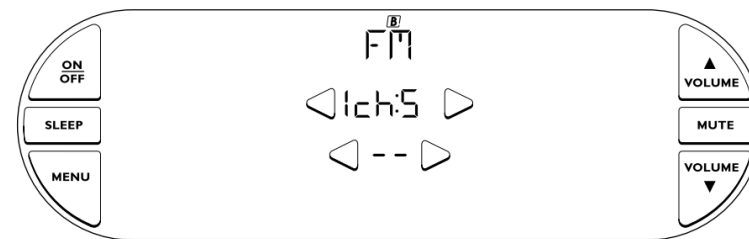
Using simulated surround for mono movie material

Bose® Videostage® decoding can process a one-channel program into five-speaker sound, directing the signals so that dialogue remains locked on-screen, while music and ambient effects fill the room. You experience a surround sensation, providing extra enjoyment when you watch older, pre-stereo movies. This feature can be used for mono TV, FM, and AM programs. It is automatically turned on when a Dolby Digital bitstream indicates that it contains a mono program.

For other mono program sources, you can engage or disengage this feature using the Personal™ music center. Press MENU and hold it until drc or 1ch:5 appears on the display. If drc is displayed, press either of the top ◀ or ▶ arrow buttons to select 1ch:5 (Figure 25). Then use the lower ◀ or ▶ arrow buttons to select between On or -- (Off). Initially, this feature is On for AM and off (--) for all other sources. If you change the setting for any source, the system is reset to these settings when you turn off a room.

Figure 25

Selecting five-speaker sound for a mono source



[3a]	<i>while operating in accordance with the first predefined grouping of zone players, receiving, from the network device over the data network, a second instruction to operate in accordance with the second predefined grouping of zone players; and</i>	<p>Bose Lifestyle further includes while operating in accordance with the first predefined grouping of zone players, receiving, from the network device over the data network, a second instruction to operate in accordance with the second predefined grouping of zone players. For example:</p> <p>See [1c]</p>
[3b]	<p><i>based on the second instruction,</i></p> <p><i>(a) ceasing to operate in accordance with the first predefined grouping of zone players such that the first zone player is no longer configured to coordinate with at least the second zone player to output media in synchrony with output of media by at least the second zone player and</i></p> <p><i>(b) beginning to operate in accordance with the second predefined grouping of zone players such that the first zone player is configured to coordinate with at least</i></p>	<p>Bose Lifestyle further includes based on the second instruction, (a) ceasing to operate in accordance with the first predefined grouping of zone players such that the first zone player is no longer configured to coordinate with at least the second zone player to output media in synchrony with output of media by at least the second zone player and (b) beginning to operate in accordance with the second predefined grouping of zone players such that the first zone player is configured to coordinate with at least the third zone player to output media in synchrony with output of media by at least the third zone player. For example:</p> <p>See [1c]</p>

	<i>the third zone player to output media in synchrony with output of media by at least the third zone player.</i>	
[7]	<i>The first zone player of claim 1, wherein the first predefined grouping of zone players does not include the third zone player, and wherein the second predefined grouping of zone players does not include the second zone player.</i>	<p>Bose Lifestyle further includes the first zone player of claim 1, wherein the first predefined grouping of zone players does not include the third zone player, and wherein the second predefined grouping of zone players does not include the second zone player. For example:</p> <p>See [1d]</p>
[8Pre]	<i>A non-transitory computer-readable medium, wherein the non-transitory computer-readable medium is provisioned with program instructions that, when executed by one or more processors, cause a first zone player to perform functions comprising:</i>	<i>See, e.g., 1[c]</i>
[8a]	<i>while operating in a standalone mode in which the first zone player is configured to</i>	<i>See, e.g., 1[d]</i>

	<i>play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:</i>	
[8b]	<i>(i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and</i>	<i>See, e.g., 1[e]</i>
[8c]	<i>(ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players</i>	<i>See, e.g., 1[f]</i>

	<i>including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;</i>	
[8d]	<i>after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;</i>	<i>See, e.g., 1[g]</i>
[8e]	<i>after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined</i>	<i>See, e.g., 1[h]</i>

	<i>groupings of zone players; and</i>	
[8f]	<i>based on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.</i>	<i>See, e.g., 1[i]</i>
[10Pre]	<i>The non-transitory computer-readable medium of claim 9, wherein the instruction is</i>	<i>See, e.g., 3[pre]</i>

	<i>a first instruction, and wherein the non-transitory computer-readable medium is also provisioned with program instructions that, when executed by the one or more processors, cause the first zone player to perform functions comprising:</i>	
[10a]	<i>while operating in accordance with the first predefined grouping of zone players, receiving, from the network device over the data network, a second instruction to operate in accordance with the second predefined grouping of zone players; and</i>	<i>See, e.g., 3[a]</i>
[10b]	<i>based on the second instruction,</i> <i>(a) ceasing to operate in accordance with the first predefined grouping of zone players such that the first zone player is no</i>	<i>See, e.g., 3[b]</i>

	<p><i>longer configured to coordinate with at least the second zone player to output media in synchrony with output of media by at least the second zone player and</i></p> <p><i>(b) beginning to operate in accordance with the second predefined grouping of zone players such that the first zone player is configured to coordinate with at least the third zone player to output media in synchrony with output of media by at least the third zone player.</i></p>	
[14]	<p><i>The non-transitory computer-readable medium of claim 8, wherein the first predefined grouping of zone players does not include the third zone player, and wherein the second predefined grouping of zone players</i></p>	<p><i>See, e.g., 7.</i></p>

	<i>does not include the second zone player.</i>	
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